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	W312W3 04 B 0010	· ·	IATED (RI	FP)	29 Jul 2004	W13G86-4155-82				
7. ISSUED BY US ARMY ENGR DISTRICT, NEW ENG	CODE	W912WJ		8. ADI	DRESS OFFER TO	(If other than I	rem 7) CC	DDE		
696 VIRGINIA RD										
CONCORD MA 01742-2751	TEL:			S	See Item 7		TEL:			
	FAX: 978-318	3-8207					FAX:			
NOTE: In sealed bid solicitations "offer" and							.,,,,			
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Sealed offers in original and	2 copies for furnishing	the sunnlies				he received at the	nlace specified in	Item 8	or if	
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conditions contained in this solic	itation.		EDITOLIE		• • • • • • • • • • • • • • • • • • • •		5.44# ADDD500			
10. FOR INFORMATION A. NAME B. TELEPHON CALL: COLLEEN M JACQUET 978-318-836					e area code) (NO		E-MAIL ADDRESS			
CALL. COLLECT	WIJAOQOLI		3-318-8368			Co	lleen.m.jacquet@usace.ar	my.mii		
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26. NAME OF CONTRACTING OFFICER (Type or print)					27. UNITED STATES OF AMERICA 28. AWARD DATE					
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Section A - Solicitation/Contract Form

DESCRIPTION OF SERVICES

FURNISH ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT TO PERFORM SHIPYARD REPAIRS TO TUG "MANAMET" LOCATED AT THE CAPE COD CANAL, BUZZARDS BAY, MASSACHUSETTS. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE ATTACHED SPECIFICATIONS.

NOTE: BIDS WILL BE ACCEPTED ONLY FROM CONTRACTORS WHOSE REPAIR FACILITIES ARE WITHIN 50 MILES OF THE CAPE COD CANAL FIELD OFFICE, BUZZARDS BAY, MASSACHUSETTS.

WAGE DETERMINATION: THE SERVICE CONTRACT ACT IS APPLICABLE TO THIS SOLICITATION AND WILL BE MADE PART OF THE RESULTANT CONTRACT.

INTERESTED PARTIES SHOULD NOTIFY THE CONTRACTING OFFICE OF WHERE THE WORK WILL BE DONE, AND AN APPLICABLE WAGE DETERMINATION WILL BE SUPPLIED.

MAGNITUDE OF WORK: THE ESTIMATED COST OF THIS WORK IS \$25,000.00 TO \$100,000.00.

GOVERNMENT POC: FRANCIS DONOVAN OF THE CAPE COD CANAL FIELD OFFICE (978) 318-8501. INVOICES ARE TO BE SUBMITTED TO MR. DONOVAN AT THE CCC FIELD OFFICE.

CONTRACTOR DUNS#	
CONTRACTOR CAGE CODE	_
CONTRACTOR TAX ID#	
CONTRACTOR FAX #	

Section B - Supplies or Services and Prices

ITEM NO 0001	SUPPLIES/SERVICES Drydocking & Launching	QUANTITY 1	UNIT Lump Sum	UNIT PRICE NA	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0002	SUPPLIES/SERVICES Lay Days (if directed)	QUANTITY 5	UNIT Days	UNIT PRICE	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0003	SUPPLIES/SERVICES Utilities & Services	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$

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ITEM NO 0004	SUPPLIES/SERVICES	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$	AMOUNT
	Gas-Free and Air Quality	Γests	r		•	
				NET AMT	\$	
FOB:	Destination					
ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	¢.	AMOUNT
0005	Stud Replacement (if direct	40 cted)	Each	\$	\$	
				NET AMT	\$	
FOB:	Destination					
ITEM NO 0006	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE N/A	\$	AMOUNT
0006	Ballast Tank Cleaning	1	Lump Sum	IN/A	Ф	
				NET AMT	\$	

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ITEM NO 0007	SUPPLIES/SERVICES Preparation of Hull	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0008	SUPPLIES/SERVICES	QUANTITY 3,500	UNIT Square Foot	\$ UNIT PRICE	\$ AMOUNT
	Sandblasting Below Water (if directed)	ime			
				NET AMT	\$
FOB:	Destination				
ITEM NO 0009	SUPPLIES/SERVICES	QUANTITY 2,500	UNIT Square Foot	\$ UNIT PRICE	\$ AMOUNT
	Sandblasting Above Water (if directed)	line	1000		
				NET AMT	\$

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ITEM NO 0010	SUPPLIES/SERVICES Application of Surface Coa	QUANTITY 3,500 ating to Hull	UNIT Square Foot	\$ UNIT PRICE	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0011	SUPPLIES/SERVICES Application of Surface Coa Sandblasted Areas Below		UNIT Square Foot ed)	\$ UNIT PRICE	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0012	SUPPLIES/SERVICES Application of Surface Coa Sandblasted Areas Above V	QUANTITY 2,500 ating to Waterline (if direct	UNIT Square Foot ed)	\$ UNIT PRICE	\$ AMOUNT
				NET AMT	\$

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ITEM NO 0013	SUPPLIES/SERVICES Q Power Sand and Paint Upper Hull (if directed)	QUANTITY 2,500	UNIT Square Foot	\$ UNIT PRICE	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0014	SUPPLIES/SERVICES Q Sacrificial Zines	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0015	SUPPLIES/SERVICES Q Rudder Removal, Reinstallation	QUANTITY 1 on & Testing	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$

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ITEM NO 0016	SUPPLIES/SERVICES Tailshaft Alignment	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0017	SUPPLIES/SERVICES Tailshaft Rehab	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0018	SUPPLIES/SERVICES Stern Tube Inspection and Rehab	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$

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ITEM NO 0019	SUPPLIES/SERVICES Forward Cutlass Bearing Replacement (if directed)	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0020	SUPPLIES/SERVICES After Cutlass Bearing Replacement (if directed)	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0021	SUPPLIES/SERVICES Propeller Shaft Packing and Clearance	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$

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ITEM NO 0022	SUPPLIES/SERVICES Rope Guard	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0023	SUPPLIES/SERVICES A.B.S. Inspection of Vesse Inc. payments to ABS	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0024	SUPPLIES/SERVICES Fuel Tank Preparation	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$

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ITEM NO 0025	SUPPLIES/SERVICES Lower Bow Stem Fender Replacement	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0026	SUPPLIES/SERVICES Furnace Uptake Rehab	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0027	SUPPLIES/SERVICES AC Generator Renewal	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$

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ITEM NO 0028	SUPPLIES/SERVICES Renewal of Steam Heating Boiler and Systems	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0029	SUPPLIES/SERVICES Fabrication and Installation of Drip Pans	QUANTITY 1	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
				NET AMT	\$
FOB:	Destination				
ITEM NO 0030	SUPPLIES/SERVICES Installation of Port DC Generator GFE Sea Strain	QUANTITY 1	UNIT Lump Sum	UNIT PRICE	AMOUNT
				NET AMT	

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ITEM NO 0031	SUPPLIES/SERVICES Renewal of Potable Water & Cap. Air Tank	QUANTITY 1 Pump	UNIT Lump Sum	UNIT PRIC N/A	SE \$	AMOUNT	
				NET AMT	\$		
FOB: Destination							
ITEM NO 0032	SUPPLIES/SERVICES Painting of Interior Decks	QUANTITY 904	UNIT Square \$ Foot	UNIT PRIC	Œ \$	AMOUNT	
				NET AMT	\$		
FOB: Destination							
ITEM NO 0033	SUPPLIES/SERVICES Repair of Steering Gear Cover & Renewal of Grat.	QUANTITY 1	UNIT Lump Sum	UNIT PRIC N/A	Œ \$	AMOUNT	
				NET AMT	\$		

Section C - Descriptions and Specifications

SPECIFICATIONS

SPECIFICATIONS FOR REPAIRS TO ARMY TUG "MANAMET"

1.0 DESCRIPTION OF VESSEL

Construction of Hull and Superstructure	Steel
Length Overall	107 ft.
Beam	26.5 ft.
Draft (forward)	9.5 ft.
Draft (aft)	12.0 ft.
Displacement, Ld. Tons	470

2.0 DRYDOCKING AND LAUNCHING

2.1 Drydocking for Specified Work.

- a. The vessel will be drydocked to complete all underwater work required by these specifications. The docking plan for the vessel, drawing LT-1936-S0700-H-1238589, will be furnished to the Contractor prior to delivery of the vessel for repairs. Using this docking plan, keel and bilge blocking will be provided to adequately support the entire hull and allow for the inspection of the transducer cover plates and wells located between frames 19 and 20 on the Port and starboard side of the keel. After all the underwater work has been completed as specified and is accepted by the Contracting Officer or his authorized representative, the vessel will be launched. After acceptance of all work, the vessel will remain the responsibility of the Contractor for a period not to exceed 24 hours pending the arrival of the Government tug crew. During this period, the Contractor will be responsible for all vessel security and utility services.
- b. The bid price for Item 1, Drydocking and Launching, shall cover all costs associated with docking including lay days, demurrage, weekends, and holidays.
- 2.2 <u>Lay Days (if directed)</u>. If directed, the Contractor will extend the drydocking availability, or lay days, for one or more successive days beyond the time required to perform the underwater work specified in this

job order. Payment for this Item $\underline{2}$ (if directed) will only be made when additional drydock work is performed by contract change order.

3.0 UTILITIES AND SERVICES

- 3.1 <u>Utilities</u>. The Contractor will furnish dockside and drydock services and utilities for the entire length of time that the vessel remains at the shipyard. Services will be provided immediately upon delivery of the vessel to the Contractor and be continuous until the vessel is accepted by the Contracting Officer. Under this item, the Contractor will be responsible for the vessel and its equipment while in his possession.
- 3.2 The utilities and services to be furnished as follows:
 - a. Necessary labor to connect, maintain and disconnect all utilities and services.
 - b. Electric power consisting of 60 AMP, 208 VAC single phase. Temporary connections between AC and DC are not permitted.
 - c. Fresh water to the vessel's potable water system.
 - d. Mooring lines, line tenders and a secure berth.
 - e. Trash and garbage removal.

Provide fire and security watch. A charged 2 1/2-in. fire hose will be maintained at all times. This hose will terminate on deck with "Y" connection valve suitable for attaching two 1 1/2-in. fire hoses. An adequate amount of hose will be stored on deck to reach all vessel compartments.

The interior of the vessel shall be maintained at a minimum temperature of 65 degrees F. The vessel's service boiler may be used for this purpose provided it is maintained and attended by the Contractor. If ship's service boiler is inadequate or becomes inoperative, alternate methods of heating the vessel will be implemented at the expense of the Contractor.

The vessel's service lighting will not be utilized. The Contractor will provide his own lighting to perform work described under this specification onboard the vessel. All such temporary lighting will comply with OSHA regulations for type of work being performed and space conditions work is being performed in.

Ship cleaners at least once per week and at the conclusion of the job to clean all compartments and spaces within the vessel where the Contractor performed work.

3.3 <u>Payment</u>. All costs associated with utilities and services provided as described above will be included in the bid price for Item <u>3</u>, Utilities & Services.

4.0 GAS-FREE TESTS

- 4.1 General. Prior to any burning, cutting or welding associated with work required in this specification, the Contractor will secure the services of a U.S.C.G. approved Licensed Marine Chemist to test the compartments where work will be performed. These compartment tests will insure that they are gas-free and comply with OSHA Confined Space Entry Permit regulations for workers and shall remain gas free and meet OSHA air quality for worker during repairs and inspections of confined spaces. A certificate of gas-free and air quality conditions will be delivered to the Contracting Officer or his authorized representative and a copy posted on the vessel prior to performing any work in the compartments effected. A certified competent person will conduct daily gas free and air quality tests. These daily tests will insure safe conditions exist in all compartments and spaces described below and comply with OSHA Maritime Confined Space Practices. A daily log of all compartment and space readings will be completed each day prior to the commencement of work on the vessel. A copy of the daily Confined Space Monitoring Log Sheet will be given to the COR daily. The compartments that have been identified as requiring a gas-free test are the forward and after ballast tanks, potable water tank, stuffing box compartment, engine room, fuel day tank, engine room bilges, sound room, chain locker, lazarette, fuel tanks (7), slop tank (1), bilge slop compartment, sanitary holding tank and rudder. It is the Contractor's responsibility to review these specifications to determine if any other compartments require testing in order to perform the work required under these specifications. After completion of all welding and acceptance of all work relating to the requirements for gas-free and air quality control. The Contractor will reinstall the access covers with new 1/8 in. thick neoprene or cork gaskets and make them oil and water tight. The threads on the removed hatch cover studs will be cleaned up with a thread chaser and/or die nut, to insure nicked or dirty threads are clean and operational.
- 4.2 <u>Hatch Stud Replacement (if directed)</u>. During the removal and reinstallation of the access hatch covers, the hold down studs may become damaged or broken. The Government Inspector will review the access cover studs to determine if any studs need to be replaced and, the Government Inspector will direct their

removal by drilling and tapping threads. A new 5/8in. x 1 1/2in. steel N.C. stud will be furnished and welded in place by the Contractor.

4.3 Payment.

- a. All costs associated with ballast tank and rudder work, except for testing and stud replacement, will be included in the appropriate bid item for the associated work.
- b. All work associated with gas-free and air quality testing will be included in the bid price for Item 4, Gas-Free and Air Quality Tests.
- c. All costs associated with access hatch stud replacements will be included in the bid price for Item <u>5</u>, Stud Replacement (if directed). There will be no payment for this item if no work is directed to be performed.

5.0 BALLAST TANK PREPARATION

- General. The Contractor will remove all fresh water ballast, sludge and sediment from the forward and after ballast tanks. The forward tank capacity is approximately 3,200 gallons and the after tank is approximately 8,900 gallons of fresh water. The tanks will be hand cleaned using brushes and low-pressure water supply as furnished by a local utility company. No mechanical apparatus will be used and all hand tools selected for use in cleaning will not mar or disturb the paint finish. A mild detergent may be used to assist in the cleaning. All residues of sediment, growth and detergent will be removed from the tanks. The existing strap type bolt on zinc plate will be removed before cleaning commences in each tank. Upon completion of cleaning, tank surfaces shall be free of all foreign matter.
- 5.2 Zincs. After acceptance of the cleaning work by the Government Inspector, the X10, MIL-A-1800 2H strap type, bolt on zinc plates in the ballast tanks will be replaced in kind. The forward tank has four (4) bolt on zincs and the after tank has six (6) bolt on zincs. Any damaged or missing 1/2 in. studs used to secure the zinc plates shall be replaced with 304 stainless steel hardware.
- 5.3 <u>Payment</u>. All costs associated with paragraph <u>5.0</u> shall be included in the bid price for Item <u>6</u>, Ballast Tank Cleaning.

6.0 PREPARATION OF HULL

- 6.1 Prior to any work on the preparation of the hull, the Contractor will insure the following is accomplished:
 - a. Watertight doors and hatches are secured.
 - b. All sea valves are secured.
 - c. Stern bearing and shaft are covered and protected.
 - d. Rudder bearings and seals are covered and protected.
 - e. Remove all sea chest strainers.
 - f. Remove all hull, skeg, rudder and sea chest zincs.
 - g. All glass areas are covered and protected.
 - h. Remove tail shaft rope guard.
 - i. Port and starboard keel transducer lexan well plates are covered and protected.
- High Pressure Water Blasting. That area of the hull from the top of the bulwarks down to and including the keel, sea chests, both sides of the sea chest strainers, entire exterior of the rudder and skeg will be high pressure washed with fresh water at a minimum nozzle discharge pressure of 2000 psi. Growth accumulation may have to be manually removed prior to pressure washing. Special attention will be given to water pressure washing interiors of sea chests and undersides of the keel plates. All growth, barnacles and loose paint will be removed from the sea chest, hull, rudder and skeg. Prior to accomplishing the work described in paragraph 7.0, Applications of Paint and/or Surface Coatings, the hull will be inspected by the Government Inspector to determine if additional surface preparation is necessary and to assure a clean dry surface at the time of initial surface coating application.
- 6.3 Sandblasting Below Waterline (if directed). After completion of all work described in paragraph 6.2, High Pressure Water Blasting, the Contracting Officer or his authorized representative may require spot sandblasting and/or a complete sandblasting of the hull, previously cleaned by water blasting, equivalent to "White Metal Blast Cleaning" as defined by Steel Structures Painting Council Specifications SSPC-SP5. Special attention will be given to sandblasting interior of sea chest and underside of keel plates. All blasting grit shall be removed from topsides of vessel prior to the application of surface coatings. Areas that have been sandblasted and left overnight or areas that develop a film of rust or oxidation after initial blasting will be blasted again as necessary to assure a clean, dry surface at the time of initial surface coating applications. Other areas that may become spray sandblasted by mistake will be repaired and recoated with the proper surface coating applications to the satisfaction of the Contracting Officer or his authorized representative. All areas described in paragraph 6.1 will remain covered during spot sandblasting and/or complete sandblasting.

- 6.4 Sandblasting Above Waterline (if directed). After completion of all work described in paragraph 6.2, High Pressure Water Blasting, the Contracting Officer or his authorized representative may require spot sandblasting and/or a complete sandblasting of the hull, from the area one foot above the waterline up to and including the top of the cap rail equivalent to "White Metal Blast Cleaning" as defined by Steel Structures Painting Council Specifications SSPC-SP5. In addition to all areas described in paragraph 6.1, the deckhouses and associated structures and deck machinery will be completely covered and protected. The bulwark deck scuppers will be covered and securely blocked from the inside of the bulwarks. All blasting grit shall be removed from topsides of vessel prior to the application of surface coatings. Areas that have been sandblasted and left overnight or areas that develop a film of rust or oxidation after initial blasting will be blasted again as necessary to assure a clean, dry surface at the time of initial surface coating applications. Other areas that may become spray sandblasted by mistake will be repaired and recoated with the proper surface coating applications to the satisfaction of the Contracting Officer or his authorized representative.
- 6.5 <u>Payment</u>. All cost associated with paragraph <u>6.0</u> except for sandblasting, will be included in the bid price for Item 7, Preparation of Hull.

All cost associated with paragraph <u>6.3</u> will be included in the bid price for Item No. 8, Sandblasting Below Waterline (if directed). There will be no payment for this item if no work is directed to be performed.

All cost associated with paragraph <u>6.4</u> will be included in the bid price for Item No. 9, Sandblasting Above Waterline (if directed). There will be no payment for these items if no work is directed to be performed.

- 7.0 APPLICATION OF PAINT AND/OR SURFACE COATINGS (MANAMET)
- 7.1 General. All paint shall be furnished and applied by the Contractor in strict accordance with requirements of these specifications. Where duplicate coats of the same surface treatment are to be applied, the color of the first application will be tinted sufficiently to assure complete coverage of the second application. Paints and painting materials shall be delivered in unbroken containers, properly labeled to indicate the contents, name of manufacturer, and any special directions or information deemed necessary, all of which shall be legible at the time of use. Paints and painting material shall be stored undercover and protected from extremes of temperatures.
- 7.2 Application of Paints and Protective Coatings.

- a. The first application will be applied immediately after blasting in accordance with the manufacturer's specifications. Prior to applying the initial coat, all areas to be painted and/or coated will be blown clean with filtered compressed air to insure removal of bottom growth or blasting dust and grit. The areas of blocking and underside of the keel plates, will be given special attention for cleaning. The equipment used for blow cleaning the blasted areas will have a minimum capacity of 200 cfm at 100 psi. In addition, all through hull fittings and sea chests will be vacuumed clean of blasting grit and dust.
- b. Paints and protective coatings shall be mixed, thinned and prepared for use in strict conformance with manufacturer's instructions. Spray painting equipment shall be suitable for the material to be applied and shall be fitted with traps, separators, mechanical agitators, pressure gauges and pressure regulators. Spray painting shall be supplemented with brush work where necessary to coat surfaces which may not be properly coated by spraying.
- c. All painting shall be done in a workmanlike manner, free of holidays, pinholes, bubbles, runs, drops, ridges, laps and variations in color, texture and gloss. All coats will be applied in such a manner as to produce an even film thickness. Edges, corners, seams, joints, welds and surface irregularities shall receive special attention to insure an adequacy of coatings and compliance with the manufacturer's recommendations by use of a dry film thickness gauge or an electric holiday detector.
- d. When necessary, removable equipment adjacent to the surfaces to be painted will be removed to permit cleaning and painting of such surfaces and will be reinstalled. Damaged paint surfaces will be retouched or repainted to the satisfaction of the Contracting Officer's Representative.
- 7.3 <u>Atmospheric Conditions.</u> Paints and protective coatings shall be applied only under atmospheric conditions favorable to drying and which preclude condensation on surfaces to be painted. Sufficient time shall elapse between the application of coats to permit them to properly dry, and this time shall be modified as necessary to suit adverse weather conditions.

7.4 Surface Coats Below Waterline.

a. All areas prepared by sandblasting in accordance with paragraph <u>6.3</u> shall receive the following preliminary coats of paints. Care shall be taken to prevent a heavy overlapping of the paint onto adjacent surface areas not sandblasted.

1st application, one coat Devoe #235 Buff, Multi Purpose Epoxy Coating, Min. 8 to Max. 10 mils WFT, Min. 5 to Max. 6 mils DFT.

2nd application, one coat Devoe #235 Gray, Multi Purpose Epoxy Coating, Min. 8 to Max. 10 mils WFT, Min. 5 to Max. 6 mils DFT.

b. The waterline shall be cut in from 9 ft.-6in. forward to 14 ft.-6in. aft. The entire hull below the waterline including the rudder, propeller, sea chest interiors and both sides of the sea chest strainers shall receive the following final paint applications:

1st application, one coat Devoe ABC-AF #3 Black, Ablative anti-fouling coating, Min. 7 to 8 mils WFT, Min. 4 mils DFT.

2nd application, one coat Devoe ABC-AF #3 Red, Ablative anti-fouling coating, Min. 7 to 8 mils WFT, Min. 4 mils DFT.

- c. That surface area from the waterline to one foot above shall receive a finish paint coat of Devoe #229 Hull Black, Min. 5 to 6 mils WFT, Min. 4 to 5 mils DFT.
- d. The transducer plates shall receive a light coat of the 2^{nd} anti-fouling. The vessel shall not be launched for at least 24 hours after application of the final coat of anti-fouling.
- 7.5 <u>Draft and Plimsoll Marks.</u> After completion of all surface coatings, the Draft and Plimsoll marks will receive 2 coats of white standard marine paint.

7.6 <u>Surface Coats Above Waterline</u>.

a. All areas prepared by sandblasting in accordance with paragraph <u>6.4</u> shall receive the following preliminary coats of paints. Care shall be taken to prevent a heavy overlapping of the paint onto adjacent surface areas not sandblasted.

1st application, one coat Devoe Catha-Coat #302 Inorganic zinc Min. 5 to 7 mils WFT, Min. 3 to 5 mils DFT.

2nd application, one coat Devoe #235 Buff, Multi Purpose Epoxy Coating, Min. 8 to 10 mils WFT, Min. 5 to 6 mils DFT.

3rd application, one coat Devoe #235 Black, Multi Purpose Epoxy Coating, Min. 8 to 10 mils WFT, Min. 5 to 6 mils DFT.

4th application, one coat Devoe #229 Hull Black, Min. 7 to 8 mils WFT, Min. 5 to 6 mils DFT.

- 7.7 <u>Marking Vessel.</u> The name and/or other designations for the vessel will be accomplished in accordance with the following paragraphs:
 - a. On both port and starboard bows. The name of the tug, in letters 8-inches high, will be placed midway on the bulwarks, and approximately 9 feet back from the stem or forward most part of the hull.
 - b. Across the stern. Centered on the stern bulwarks, two horizontal lines of vertical letters, as follows, with 4-inch space between lines:

MANAMET - 8-inches high
US ARMY CORPS OF ENGINEERS- 4 inches high

- c. All lettering will be Gothic block capitals, lettering will be painted on.
- 7.8 Power Sand and Paint Upper Hull. The portion of the hull from one foot above the waterline up to and including the top of the bulwarks may require spot and/or complete power sanding using 80 grit sandpaper. The areas that are sanded will be coated with one coat of Devoe No. 229 as described in paragraph 7.6 (a). The name and hail will be painted on the bow and the stern as described in paragraph 7.7 (a), (b), and (c). All sanding grit and dust will be removed prior to painting.

7.9 Payment.

a. All costs associated with the application of anti-fouling coatings including the single coat of hull black one foot above the waterline will be included in the bid price for Item No. 10, Application of Surface Coatings to Hull.

- b. All costs associated with complete application of surface coatings to sandblasted areas below the waterline will be included in the bid price for Item No. 11, Applications of Surface Coatings to Sandblasted Areas Below Waterline (if directed). There will be no payment for this item if no work is directed to be performed.
- c. All costs associated with complete application of surface coatings to sandblasted areas above the waterline will be included in the bid price for Item No. 12, Application of Surface Coatings to Sandblasted Areas Above Water (if directed). There will be no payment for this item if no work is directed to be performed.
- d. All costs associated with Power Sand and Paint Upper Hull will be included in the bid price for Item No. 13, Power Sand and Paint Upper Hull, (if directed). There will be no payment for this item if no work is directed to be performed.

8.0 SACRIFICIAL ZINCS

Prior to launching and after application of all surface coatings, the Contractor if directed shall provide and install new bolt on zincs Paint shall <u>not</u> be applied to zinc surfaces, and care is to be taken that the zinc anodes do not become coated with tar, oil, or any other contaminant. For the four sea chests, the Contractor will inspect and replace all damaged or missing studs and nuts, as required. New zincs will be placed along the hull, skeg, stern frame, rudder and sea chests as follows:

Number of Zinc Plates	Location
8 each ½ in. x 6 in. x 6 in. zinc plates	2 each in each of the four sea chests
22 each 1 ¼ in. x 6 in. x 12 in. zinc plates	11 on each side Hull and Rudder
4 each 1 1/4 in. x 6 in. x 6 in. zinc plates	2 on each side of rudder and skeg

- 8.2 All sea chest strainers will be replaced after installing new zincs prior to launching.
- 8.3 <u>Payment</u>. All costs associated with paragraph <u>8.0</u> will be included in the bid price for Item <u>14</u>, Sacrificial Zincs.

9.0 RUDDER REMOVAL, REINSTALLATION AND TESTING

- 9.1 <u>Removal</u>. The vessels rudder shall be removed to allow for the withdrawal of the propeller and tailshaft. Palm bolts and nuts shall be stored and marked for reinstallation.
- 9.2 After the completion of all propeller, stern tube inspection, tailshaft work and completion of any directed repairs, reassemble the rudder in good working condition. Prior to installing the rudder, both upper and lower palm faces will be sandblasted to SSPC-SP5-63 and coated with one (1) application of Amison #86, 1-2 mils DFT. The key and keyways will not be sandblasted. Care will be taken to ensure keyways are properly protected.
- 9.3 <u>Reinstallation.</u> After completion of above, the rudder shall be installed on the vessel. Palm bolts will be tightened on the vessel. Palm bolts will be tightened securely and the bolts and nuts tack welded to the palm flange. DO NOT weld nuts to bolts. The ¼ in. x 2 in. x 30 ft. main deck steering cover gasket will be replaced with a new gasket. All butt end fits of the steering cover gasket will be dovetailed to ensure a watertight fit. The interior of the steering ram main deck compartment will be cleaned of all grease, oil and water and will remain clean during repairs and closing.
- 9.4 <u>Rudder Test</u>. All drain plugs shall be removed from the rudder and both rudder chocks. The interior shall be filled and flushed clean with fresh water. Upon completion, the rudder shall be hydrostatically tested in the presence of the Contracting Officer or his authorized representative. A pressure of 2 P.S.I. will be maintained for a period of two hours.

9.5 Sealing of Rudder.

- a. Upon completion of cleaning, testing and acceptance by the Contracting Officer or his authorized representative, all rudder and chock plugs will be removed to allow the interior of the rudder and chocks to dry prior to float coating.
- b. The interior of the rudder will be float coated using eight (8) gallons of float coat oil. Float coating will be accomplished by adding the eight gallons of float coat oil through the top vent hole, then slowly filling the rudder with fresh water through the bottom fitting until float coat oil appears at the top vent hole. Drain off the fresh water slowly and secure all rudder plugs using an anti-seize compound on plug threads. Both rudder chock interiors will be float coated in the same manner described for the rudder interior, except that one gallon of float coat oil shall be used per rudder chock.

9.6 Payment. All costs associated with work in paragraph 9.0 will be included in the bid price for Item 15Rudder Removal, Reinstallation, and Testing.

10.0 TAILSHAFT ALIGNMENT

- 10.1 General. Upon delivery of the vessel to the Contractor's dock, the trim and stability of the "MANAMET" will be recorded. Prior to performing any work outlined in this contract, the following must be accomplished. Install a shaft jack to properly support and position the tailshaft ¼ inch aft of its normal made up running position. Remove all tailshaft coupling bolts. Clean and dress both coupling halves to obtain valid tolerance readings. Using a feeler gage and dial indicator, rotate the tailshaft for radial and face readings at four (4) locations, 90 degrees apart, from the tailshaft coupling to the reduction gear coupling. These readings will be taken for a minimum of two (2) full tailshaft revolutions. The above procedure will be repeated to obtain radial and face readings from the reduction gear coupling to the tailshaft coupling.
- 10.2 Upon completion of all other items under this contract and prior to make up of the tailshaft, the same procedure as outlined above for the tolerance readings at the tailshaft and reduction gear couplings will be repeated 24 hours after launching with the vessel in the same trim and stability as previously recorded.

 Care will be taken to ensure all machine surfaces of tailshaft and couplings are filled and sanded smooth, free from old or new nicks, dents or marks that would not otherwise allow a good make up and valid coupling and shaft readings. All hardware will be match marked for reassembling.
- 10.3 Both alignment checks will be performed in the presence of the Contracting Officer or his authorized representative. A copy of both sets of readings with trim and stability recorded, will be furnished to the government inspector at the time the readings are taken.
- 10.4 <u>Payment All costs associated with work in paragraph 10.0</u> will be included in the bid price for item <u>16</u>
 Tailshaft Alignment

11.0 TAILSHAFT REHABILITATION

11.1 General.

a. Propeller is a type 304L, stainless steel, 94-inch diameter, 4 bladed unit weighing 3,800 pounds

b. Tailshaft is ABS Grade 2, forged steel shaft, 9 ½ in. diameter X 26 ft. 1 1/2 in. Long, weighing 6,330 pounds, with two 5/8 in. x 44 in. bronze shaft liners fitted to the shaft in the cutlass bearing area.

11.2 Removal and Inspection.

- a. Remove the propeller and tailshaft from the vessel. Care will be taken to ensure coupling halves, bolts, and keys are marked to their respective locations. No corrective repairs to the propeller are anticipated. The propeller shall be properly stored while off the vessel. The protective coating between the tailshaft liners shall be removed, and all surfaces of the tailshaft shall be thoroughly cleaned. The tailshaft shall be set up in a lathe to check runout at both ends, and end of taper by dial indicator. The above readings shall be witnessed by the Contracting Officer or his authorized represent.
- b. While the tailshaft is in the lathe, the Contractor will conduct non-destructive tests to areas of the tailshaft, keyways and keys, as required by the Contracting Officer or his authorized representative. He will also take two (2) diameter measurements on each tailshaft sleave, 90 degrees apart, at both ends and the middle and record these readings. The recorded readings and test results will be submitted in one clear original to the Contracting Officer for review and evaluation. Provided all test results are satisfactory, the tailshaft will prepared and a new protective glass covering system applied equal to or better than Philadelphia Resins Phillyclad for marine propeller shafts applied between the bronze shaft sleeves per A.B.S. requirements.

11.3 Installation

- a. After all the stern tube work is complete, the Contractor will re-install the tailshaft and propeller. The Contractor will supply and install a new propeller seal ring and propeller fairwater seal. The propeller and tailshaft fairwater cavities will be filled with lard.
- 11.4 <u>Payment</u>. All costs associated with work required by paragraph 11.0 shall be included in the bid price for item <u>17</u> Tailshaft Rehab.

12.0 STERN TUBE INSPECTION AND REHABILITATION

- 12.1 <u>General</u>. The stern tube and cutlass bearings will be inspected. Depending on the condition of bearing, the Government will decide on whether or not their replacement and/or stern tube repair work is warranted.
- 12.2 <u>Inspection.</u> The Contractor shall visually inspect the stern tube and cutlass bearings for defects. Take four (4) sets of internal diameter measurements 45 degrees apart at the after, center and forward ends of each bearing. The above readings will be witnessed by the Contracting Officer or his representative. Record inspection results and measurements and submit them to the Contracting Officer for his review. The Contracting Officer or his authorized representative will determine whether the stern tube requires work or the cutlass bearings need to be replaced. If directed, the Contractor will remove and replace the existing forward and/or after cutlass bearing in kind.
- 12.3 <u>Sandblasting and Painting</u>. The interior of the stern tube with the exception of the bearing surfaces shall be cleaned of all grease and oil and sandblasted in accordance with Steel Structure Painting Council Specification SSPC-SP-10. After blasting by the Contractor and inspection by the Contracting Officer or his authorized representative, the entire stern tube with the exception of the bearing surfaces shall be coated with the same system as described in para. 7.4 (a) and (b), Surface Coats Below the Waterline. Temporary covers will be provided at each end of the stern tube to protect the stern tube bearing surfaces from blasting grit and dirt. Until reinstallation of the tailshaft and cutlass bearings, the covers shall be secured in place whenever no work is being performed on the stern tube.

12.4 <u>Description of Stern Tube Cutlass Bearings</u>.

- a. Forward Cutlass bearing, 16 3/8 in. outside diameter flange face, bronze, rubber, 13 ½ in. O.D. x 10 ¾ in. I.D. x 25 in. long.
- b. After Cutlass bearing, 16 3/8 in. outside diameter flange face, bronze, rubber, 13 1/8 in. O.D. x 10 3/4 in. I.D. x 40 1/2 in. long.

12.5 Payment.

a. All costs associated with the stern tube rehabilitation described in section <u>12.0</u> except cutlass bearing replacement shall be included in the bid price for item 18, Stern Tube Inspection and Rehab.

- b. All cost associated with removal and replacement of the forward cutlass bearing will be included in the bid price for item 19, Forward Cutlass Bearing Replacement. There will be no payment for this item if no work is directed to be performed.
- c. All cost associated with removal and replacement of the after cutlass bearing will be included in the bid price for item <u>20</u>, After Cutlass Bearing Replacement. There will be no payment for this item if no work is directed to be performed.

13.0 PROPELLER SHAFT PACKING AND CLEARANCE

- 13.1 The existing propeller shaft packing shall be removed from the stern tube packing gland and replaced with new 1 in. Chestertron Sterlon Packing, Style 1729. Eight rings of packing on a 10 3/4 in. shaft sleeve diameter are required. Properly adjust the stern tube packing immediately after the vessel has been launched.
- 13.2 Propeller shaft clearance will be accomplished by jacking the tail shaft free of the after cutlass bearing and measuring the clearance by dial indicator and/or long feeler gauges. This test will be witnessed by the Contracting Officer or his authorized representative.
- 13.3 <u>Payment</u>. All costs associated with paragraph <u>13.0</u> will be included in the bid price for Item <u>21</u>, Propeller Shaft Packing and Clearance.

14.0 ROPE GUARD

- 14.1 The existing rope guard will be removed to accomplish the after bearing measurements. The rope guard will extend aft to within 1/8 in. of the propeller hub and will be secured to the stern tube casting with bronze flat head machine screws and/or tack welded in the same manner as the unit previously removed. The rope guard will be prepared and painted using the same paint systems described in paragraph 7.4. The rope guard will not be installed prior to completion and acceptance of work described in paragraph 10.0.
- 14.2 <u>Payment</u>. All costs associated with paragraph <u>14.0</u> will be included in the bid price for Item <u>22</u>, Rope Guard.

15.0 A. B. S. INSPECTION OF VESSEL

15.1 <u>General</u>. It is the intent of the Government to have the tug MANAMET inspected and certified by the American Bureau of Shipping during this shippard period. It shall be the responsibility of the Contractor to coordinate and pay for the required vessel inspections with the A.B.S. Inspection Office while shippard and repair work is ongoing.

The following is a list of items that will require A.B.S. inspection and coordination:

- a. Inspection of rudder see paragraph 9.0
- b. Inspection of tailshaft see paragraph <u>11.0</u>
- c. Inspection of stern tube see paragraph 12.0
- d. General hull condition
- e. Annual walk through of vessel
- 15.2 <u>A.B.S.Coordination.</u> The Contractor shall establish contact with the local A.B.S. Office as soon as possible to insure timely inspections. Particulars on the local A.B.S. office are as follows:
- . Timothy O'Day

Surveyor, New England Region

Telephone Number: (781)-826-7233 Cellphone Number: (781)-771-7444

E-Mail: today@eagle.org

- 15.3 <u>PAYMENT.</u> All costs associated with paragraph <u>15.0</u> will be included in the bid price for Item <u>23</u>, A.B.S. Inspection of Vessel including payments to the A.B.S. Office.
- 16.0 FUEL TANK PREPERATION
- 16.1 The Contractor will remove and store the Marine Grade Diesel fuel from seven (7) fuel tanks. The fuel oil from the 200 gallon engine room day tank, fuel transfer manifold and associated piping will also be removed and stored. Storage of the fuel will be done in a manner to prevent contamination. In lieu of storage, the Contractor will be responsible for providing an equal volume of #2, marine grade diesel fuel that conforms to MIL SPEC-A-A-52557A. The Government will be responsible for sampling and testing of the fuel. Any non-conformance to testing criteria will require fuel replacement at the Cape Cod Canal Field Office. Full payment for Item Number 23 will not be made until satisfactory test results are achieved. Prior to fuel removal, all tanks will be measured by the Contractor and witnessed by the government inspector to determine existing volume of fuel oil to be removed and returned to the vessel. The maximum fuel capacity of the tug is 18,000 gallons. Upon completion of the fuel oil removal, the

seven (7) fuel oil tanks, slop tank, and day tank access hatches will be opened. The fuel tank compartments will be completely cleaned and made gas free. The fuel transfer manifold and associated piping will be aired and made gas free. No smoking, open flames or welding will be allowed on the vessel during fuel tank compartment, fuel transfer manifold and associated pipe cleaning and airing until a permit for hot work is posted on the vessels. The fuel tanks and any other areas requiring a gas free certificate prior to burning or welding will be sampled before the start of work each day, by a certified competent person. A Confined Space Entry Log Book will be maintained daily and made available to the government inspector on request.

- 16.2 After completion of all welding and acceptance of all work relating to the requirements for gas free conditions, the Contractor will clean and chase the threads of the hatch studs and nuts with a die nut and tap prior to reinstalling the access hatch cover. The slop tank interior will be coated with a fine coat of mineral oil from a small spray bottle prior to installing the hatch cover. Any drips of oil into the shaft alley bilge area will be cleaned. The Contractor will then re-install the fuel tank and slop tank access hatch covers using new 1/8 in. thick neoprene (non cloth inserted) or cork gaskets. The potable water and ballast tanks will be filled with potable water to the same measured levels as on arrival at the shipyard. The fuel previously removed and stored or new fuel provided will be transferred back to the fuel tanks of the vessel. The 7 (seven) fuel tanks will be filled to the level and quantity as measured and recorded in paragraph 16.1 above. Upon completion of ballasting and refueling, all tanks will be measured and witnessed by the Government Inspector to insure all fuel oil has been returned to the vessel.
- Payment. All costs associated with the work described above will be included in the bid item number <u>24</u> Fuel Tank Preparation. Note previous note in section <u>16.1</u> concerning withholding of payment until testing acceptance.

17.0 LOWER BOW STEM FENDER REPLACEMENT

17.1 The lower bow stem fender that is approximately 4 feet long will be renewed in kind with rectangular bore Johnson Duramax 300 Series. The existing fender is approximately 8 inches by 10 inches. The damaged lower bow stem fender will be removed from the bow and disposed of. A new piece of fender with the same dimensions and from the vendor mentioned above will be installed in its place. The bow fender mounting hardware consisting of chain, eyebolts and shackles will also be renewed with galvanized hardware of the same dimensions. Any damage to the surface coatings behind this fender will be repaired prior to installation of new fender. The repairs to the surface coatings will be done in accordance with 7.6 Surface Coatings Above the Waterline. Any damage to the surface coatings while installing the lower bow

- fender will be repaired at the Contractor's expense and will follow the guidelines as mentioned in $\underline{7.6}$ Surface Coating Above the Waterline.
- 17.2 <u>Payment.</u> All costs associated with the work described above will be included in the bid Item Number <u>25</u> Lower Bow Stem Fender Replacement.

18.0 FURNACE UPTAKE REHABILITATION

- 18.1 <u>General</u>. The existing furnace uptake system will be removed and a new furnace uptake system will be fabricated and installed in a new location as described in the following paragraphs.
- 18.2 Removal of Uptake. The furnace uptake will be removed in its entirety from the oval outlet at the back of the furnace up through the 10 inch diameter by 35 foot long lower engine room horizontal pipe run. Continuing up through the 8 inch by 16 inch by 28 foot 1/8 inch steel vertical upper engine room and stack uptake and out through the top of the stack deck. The furnace uptake removable insulation pads, uptake brackets and the steel stack deck combing and weather cap will be removed and disposed of by the contractor. The insulation pads are made of needled glass fiber mat with siliconized glass fiber cloth covering. The area of the stack deck furnace outlet will be welded closed with a flush fitted ¼ inch by 14 inch by 24 inch steel closing plate with 2 inch radius corners. The closing plate will be step welded all around from both sides with full penetration welds. The stack deck closing plate will be completely sand blasted and will receive one application of Devoe, no. 304, inorganic zinc paint prior to being welded in place on the stack deck. The weld zone and effected areas will be mechanically cleaned, sanded and faired to the existing surface area. The following paint system will be applied to the weld zone, effected areas and the closing plate:
 - <u>a.</u> 1st application, weld zone and effected areas, Devoe Bar Rust, No.235, Buff, multipurpose epoxy coating, min. 5 to 6 mils DFT.
 - b. 2nd application, weld zone, effected areas and both sides of the closing plate, Devoe
 Bar Rust, No. 235, gray, multi-purpose epoxy coating, min. 5 to 6 mils DFT.
 - c. 3rd application, weld zone, effected areas and closing plate exterior, Devoe No. 229, semi gloss black, min. 2 to 44 mils DFT, interior Devoe, silver, min. 2 to 4 mils DFT.
- 18.3 <u>Grating.</u> The 14 in. x 20 in. opening in the upper engine room expanded metal grating will be closed with similar grating materials and coated with a marine quality paint, color Gray.

- 18.4 Installation of New Uptake. The new furnace uptake system will be fabricated and installed approximately 6 feet inboard of the furnace. The furnace is located in the after outboard end of the engine room on the port side. The new furnace uptake system will be fabricated with a new 316 stainless steel oval adapter at the outlet of the furnace. The new outlet adapter will attach to a 10 inch diameter by approximately 15 feet section of 316 stainless steel, 14 gauge uptake pipe running horizontally in the engine room. The new uptake will require a minimum of three (3) – 316 stainless steel 90 degree elbows to bring the uptake pipe up to the engine room overhead. The engine room portion of the uptake system will attach to the bottom end of the 10 in. diameter by approximately 15 foot vertical furnace uptake. The vertical section of the furnace uptake will be fabricated from schedule 20, weldable steel pipe 12.25 inch I.D. by 15 feet long fitted through the ¼ inch steel boat deck and down through the ¼ inch steel main deck into the engine room over head approximately 6 feet inboard of the furnace. The 12.25 inch I.D. by 15 feet weldable steel pipe will be welded 100 % on both sides of the ¼ inch steel boat deck and the main deck. The portion of the 12.25 inch by 15 feet weldable steel pipe fitted through the engine room overhead will have a doubler band welded 100 % to the pipe and the deck penetration. The doubler band will be constructed of steel that is 3/8 inch thick by 6 inches high and will be approximately 40 inches in circumference. The deck penetration will then be welded closed 100 % on the engine room side and the main deck side and made watertight. The 12.25 inch I.D. by 15 foot schedule 20 steel uptake pipe will be fitted with 5 sections of 3 foot long, 10 inch I.D. by 12 inch O.D. stainless steel Metalbestos insulated pipe. The bottom end of the stainless steel uptake pipe will be fitted with a metalbestos drip less smoke pipe adapter and the top end will be fitted with a metalbestos CT round top secured in place with a stainless steel 1/4 inch hex head sheet metal screws. The 10 inch I.D. by 3 foot long stainless steel metalbestos uptake liner pipes will have a high temperature RTV sealant applied to each twist lock surface.
- 18.5 <u>Surface Preparations and Painting.</u> The 12.25 inch I.D. by 12.75 inch O.D. by 15 foot schedule 20, steel uptake pipe and the 3/8 inch thick by 6 inch high by approximately 40 inch circumference doubler band will be completely sand blasted on the interior and exterior. All surface coatings will be applied in a manner as described in section <u>7.0</u> Application of Paint and/Surface Coatings. After complete sandblasting the interior and exterior will receive the following paint applications:
 - a. 1st application, Devoe, No. 304, inorganic zinc paint, 3 to 5 mils DFT.
 - b. 2nd application, Devoe, No. 235, multi-purpose epoxy gray paint, 4 to 6 mils DFT.
 The 2nd application of paint will be applied after the uptake pipe is welded in place on the tug. The welds and effected areas after the final installation onboard the tug

will be mechanically cleaned and will receive the 2 coats of the 2nd application of multi purpose epoxy, described above.

- 18.6 <u>Tests.</u> Prior to mechanically cleaning and painting the final installation welds, the furnace will be test run to insure all joints and fabrication are gas tight. The main deck welds will be tested with a continuous flow of water at 60 PSI for a period of 15 minutes to insure weld tightness. Any gas leak or weld that fails during tests will be repaired and retested at the expense of the contractor until satisfactory. All repairs and tests will be witnessed by the COR.
- 18.7 <u>Removable Insulation Pads.</u> The 10 inch diameter by 15 foot section of stainless steel, 14 gauge, horizontal uptake pipe leading from the oblong furnace outlet to the drip less fitting at the bottom of the vertical uptake will be completely insulated. The insulation will be fabricated in the same manner and same materials as described for the insulation being removed in section <u>18.2</u>. Stainless steel wire fastening clips will be used to secure the removable insulation pads.
- 18.8 <u>Payment.</u> All costs associated with this paragraph will be included in the bid price for Item <u>26</u> Furnace Uptake Rehab.

19.0 AC GENERATOR RENEWAL

- 19.1 <u>General.</u> This item will entail the removal of the old Westerbeke A. C. generator from the tug Manamet and the installation of a New Government Furnished Onan model 17 MDKAD A. C. Generator. This section will also cover the renewal of some of the support systems (electrical, raw water, fuel, exhaust and monitoring equipment). A copy of the generator installation manual will be given to the Contractor for reference.
- 19.2 <u>Description of Work.</u> Disconnect the support systems and remove the old generator from the engine room to shore. The Contractor will need to rig chain falls and beam clamps to move generators across engine room and up ladderwell. The ladder will have to be removed in order to get the new and the old generators in and out of the engine room. Once the old generator is in fiddly, the Contractor will have to hoist it out through the watertight door onto the main deck of the tug. The watertight door is 26 inches wide. The Westerbeke generator removed will remain property of the U.S. Army Corps of Engineers.
- 19.3 <u>Installation of New Generator.</u> The Contractor will need to modify engine mounting system to fit new generator No welding can occur unless a Gas Free Certificate is obtained. If a Gas Free Certificate is

unobtainable, the modifications must be done with a bolting arrangement. The new generator will be installed so the front of the generator is pointed toward the bow and the generating end is pointing toward the stern (the same direction of the old generator). The new generator has a drip pan that incorporates the vibration isolation mounts and will need a flat surface to bolt down the generator. The current generator is mounted on a steel plate with welded supports down to the tank tops. This plate will be reused with new holes drilled in it corresponding to the drip tray mounting holes. New ½ inch grade 8 bolts of the appropriate length with flat washers, lock washers and nylon insert nuts will be used to bolt the generator to the plate. Depending on where all the plumbing and wiring is installed the handrail system around the generator might need slight modifications. The Contractor will need to install the G.F.E. coolant recovery tank in a visible and accessible location.

- 19.4 <u>Generator Wiring Renewal.</u> The Contractor will renew the wiring from generator to the transfer switch in kind with the appropriate size wire. This will be done following all applicable laws and by a licensed electrician. All wiring will be installed in a professional neat manner and supported with clamps. All connections will be made in watertight junction boxes with terminal strips and ring type connectors no mid air splices or wire nuts will be used. The two (2) approximately 14 foot battery cables to the new generator will be renewed from the battery to the new generator in kind. The new battery cables will be supported along its entire length including under the deck plates with wire clamps.
- 19.5 Renewal of Raw Water System. The new generator requires a 1 inch NPT inlet and ¾ inch outlet piping. The existing piping is primarily 1 inch but is reduced on the inlet and outlet to ½ inch NPT pipe. The generator has capabilities to draw cooling water from the sea or from the aft ballast tank. The supply and return lines from the aft ballast tank are cupro-nickel and will not need to be renewed. The Contractor will purchase and install a new Kraissl model 73-34 1 inch NPT bronze duplex strainer. The new strainer will be adequately supported and installed in a manner to allow servicing of strainer housings. The new strainer will be installed in the same general area as the existing. The renewal will begin at the flanged right angle sea chest valve through the "tee" to the strainer. At the "tee" a nipple and a threaded flange is mated to the flanged aft ballast tank suction line valve. This nipple and flange will be renewed also. The inlet piping continues from the strainer over to the inlet of the raw water pump. At the end of the inlet piping a hose barb will be used. The inlet piping and hose barb will be installed in a manner to allow a one foot minimum length of 1 inch I.D. wire reinforced suction hose to be installed. The inlet piping will be installed so the suction hose will be free of any sharp bends. Two (2) T-bolt style stainless steel hose clamps will be installed on each end of the hose. The raw water discharge begins at the outlet of the heat exchanger that is mounted below the front of the engine. The outlet of the heat exchanger requires 34 inch wire reinforced hose. The discharge hose will be at least 1 foot in length and installed in a manner to

avoid any sharp bends. Two (2) T-bolt style stainless steel hose clamps will be installed on each end of the hose. The ¾ inch discharge piping will begin with a ¾ inch hose barb and will lead under the deck plates to the outboard side. From here the piping leads up to a 'tee" and either back to the aft ballast tank or overboard. The piping renewal will end at both the aft ballast flanged valve and the threaded union overboard valve. The overboard valve has reducing bushings installed in it that will have to be removed and renewed to accommodate the ¾ inch pipe. The aft ballast tank return valve will have to be removed and reinstalled with new gaskets so the direction of flow is correct. The inlet piping will be new 316 stainless steel 1 inch NPT schedule 40 pipe and fittings. The inlet piping needing renewal is approximately 12 feet in length. The discharge piping will be new 316 stainless steel ¾ inch NPT schedule 40 pipe and fittings. The discharge piping needing renewal is approximately 20 feet in length. Pipe unions will be used as necessary to ease assembly and later repairs. All pipe threads will be sealed with Loctite PST 592 thread sealant. The new inlet and discharge piping will be properly supported with pipe brackets as described in paragraph 20 New Pipe Brackets.

- 19.6 Renewal of Fuel Oil System. The existing fuel oil supply piping consists of ½ inch NPT pipe that is bushed down to ¼ inch NPT schedule 40 black pipe after the Racor 500 filter. The renewal will begin with the ½ inch gate valves being removed and renewed with two (2) new bronze ½ inch NPT ball valves. The short piece of flared copper tubing from the valve to the filter will be renewed in kind. The existing supply piping will be renewed in kind. The new fuel supply pipe from the filter will run below the deck plates and will terminate just above the deck plates. At the termination of the ¼ inch NPT black pipe a supply hose will be connected. The hose will have 1/4 inch NPT male swivels on both ends for ease in connection to the supply port on the generator. The existing fuel return consists of 1/8 inch copper tubing. The 1/8 inch copper tubing will be renewed with 1/8 inch NPT schedule 40 black pipe bushed down at the new ball valve. The new 1/8 inch pipe will run under the deck plates and will terminate just above the deck plates beside the new generator. At this termination, a new fuel return hose will be connected to the pipe with the other end connected to the return port of the generator. The new return hose will have 1/8 inch NPT male swivels on both ends. The new hoses will be a minimum of 1 foot in length. The new hoses will meet USCG requirement 33CFR183.558 and will have a stamp that reads "USCG Type A" on them. The hoses will be installed in a manner to avoid sharp bends and chafing. The new fuel supply piping is approximately 15 feet in length. The fuel return piping is approximately 15 feet in length. All pipe threads will be sealed with Loctite PST 592 thread sealant. The new supply and return piping will be properly supported with pipe brackets as described in paragraph 20 New Pipe Brackets.
- 19.7 <u>Renewal of Exhaust System</u>. The existing exhaust system consists of 1 ½ inch NPT pipe that runs 5 feet up and 6 feet across the engine room where it connects to a flanged 3 inch pipe. The new generator

requires an exhaust outlet of 2 inch pipe. The Contractor will renew the exhaust from the new generator's 2 inch NPT exhaust outlet to the first flange in the 3 inch exhaust piping. The new exhaust piping will consist of a G.F.E. (Government Furnished Equipment) 2 inch exhaust expansion bellows that is approximately 18 inches in length. Both ends of the exhaust bellows are 2 inch NPT. The new exhaust piping will start at the 2 inch NPT exhaust expansion bellows with a 2 inch NPT threaded flange. From this flange the 2 inch exhaust will be constructed of 2 inch schedule 40 black pipe with weld on flanges. The new 2 inch flanged exhaust pipe will rise approximately 3 ½ feet turn and run approximately 6 feet. At the point where exhaust turns to run horizontally another exhaust expansion bellows will be installed to allow for expansion horizontally. This exhaust bellows will be 2 inch stainless steel with flange ends. From this exhaust bellows the flanged 2 inch pipe will run approximately 5 ½ feet to a tee where one branch will rise approximately 9 inches to meet the existing 3 inch flanged exhaust. The bottom branch of this tee will have a condensate drain trap installed with a drain valve. This condensate drain trap will be constructed so it does not encroach on the main engine valve cover access. The exhaust bellows will be installed so it is neither expanded nor compressed. The exhaust bellows will NOT be used to compensate for exhaust misalignment. The new exhaust will be properly supported. The pipe that is between the two exhaust expansion bellows will be rigidly supported with two piece brackets as described in paragraph 20 New Pipe Brackets. The parts of the brackets that are in contact with the exhaust pipe will not be painted. The remaining horizontal part of the exhaust after the exhaust expansion bellows will have two (2) removable flexible brackets installed from the overhead. Exhaust blankets will be fabricated and installed after all tests are completed. The exhaust blankets will begin at the outlet of the generator, continue up to and include the flange of the existing 3 inch exhaust system.

Installation of Monitoring Systems. The Contractor will remove the existing temperature and oil pressure gauges from the main engine gauge panel. The new generator has a remote gauge panel that measures oil pressure, water temperature, battery voltage, and hours. This remote alarm panel has a 45 foot wiring harness that will lead from the generator to the remote panel installed in the fiddly. The 8 ½ inch by 6 1/8 inch gauge panel will be mounted in a PVC watertight box of the Carlon type. The exact location of the remote gauge panel to be determined by the COR. On the remote gauge panel there is a start/stop switch. The start portion of this switch will be disabled to prevent accidental starting when the fuel and raw water valves are closed. The remote panel wiring harness will be installed in a neat manner with any remaining wiring harness coiled up and secured. The wiring harness will be supported with vinyl covered wire clamps along the entire length. The Contractor will need to purchase and install additional gauges into the control box at the generator. The additional gauges will be mounted into the face of the control box above the breakers. The gauges will consist of oil pressure, water temperature, and battery voltmeter. The oil pressure and water temperature gauges will be mechanical with alarm legs built into them (Murphy

Swichgage). All the gauges will be 2 inch in diameter. The oil pressure and water temperature gauges will be installed in the same locations as the electric gauges with tees. The oil pressure gauge will have a hose installed with 37-degree JIC swivel ends at the engine and gauge. The hose will be rated for the appropriate pressure of the oil. The hose will be the proper length to prevent sharp bends and chafing. The hose and the capillary tube for the temperature gauge will installed in a neat manner. The alarm legs from the oil pressure and temperature gauges will be tied into the existing (Henschel) "Engine Room Monitoring Panel" that is mounted above the engine room main engine controls. The use of alarm relays might be needed in order for the low oil pressure and high temperature signals to trip the audible and visual features of the Henschel panel. The panel will be clearly labeled with the following "AC GEN. Low Oil Pressure" and AC GEN. High Water Temp." The Contractor will purchase a new 0-300 VAC voltmeter and a new 0-100 Amp ammeter. The new gauges will be 3 ½ inch square in size and will measure the incoming amps and volts to the AC Square-D distribution panel. The Contractor will install the new voltmeter and ammeter in an appropriately sized PVC watertight box of the Carlon type. The new box will be located next to the AC Square-D distribution panel in the engine room with the exact location to be determined by the COR. All wiring connections will be made in watertight junction boxes with terminal strips and ring type connectors no mid air splices or wire nuts will be used.

- 19.9 <u>Startup and Tests</u>. The Contractor will arrange and pay for an authorized Onan service technician to do the initial startup and begin the warranty. The generator will not be started unless authorized by Onan. During the initial startup, any problems found by the Onan service technician or COR relating to the work done by the Contractor will be corrected and retested at the Contractor's expense. The COR will witness the startup, and if necessary any repairs.
- 19.10 Preparation and Painting. Once the old generator is removed the plate below it will be degreased, cleaned and prepared for paint. The generator support plate, piping and fittings installed during this renewal will receive two (2) coats of Bar Rust 235, 6 mils DFT (dry film thickness). The first application will be Gray and the second application will be Oxide Red. The piping and fittings in the areas above the deck plates will then receive two (2) coats Amercoat 5450 White Gloss 4 mils DFT. Any disturbed areas during the renewal of the AC generator will be faired, prepared, and receive two (2) coats of Bar Rust 235, 6 mil DFT. The first application will be Gray and the second application will be Oxide Red. The disturbed areas will then be top coated with two (2) coats of Amercoat 5450 of the appropriate color and finish, 4 mils DFT. The surface coatings will be applied in a manner as described in section 7.0 Application of Paint and/or Surface Coatings.

19.11 <u>Payment</u>. All costs associated with this section will be included in the bid item <u>27</u> AC Generator Renewal.

20.0 NEW PIPE BRACKETS

- 20.1 <u>General</u>. All new pipe brackets directed to be installed on the various systems in this specifications will be fabricated and prepared as follows:
 - a. The pipe brackets will be fabricated from ¼ inch by 2 inch steel or stainless steel flat stock.
 - b. The pipe brackets will be of the two piece clamp style with two (2) support legs of the appropriate lengths. The clamp brackets will be bolted together with the appropriate length 3/8 inch NC stainless steel hex bolts, lock washers and hex nuts. The support legs may be welded to one half of the brackets.
 - c. The pipe brackets will be constructed so they fit the pipe snugly with a thin strip of rubber installed on both halves.
 - d. All surfaces of the new brackets will be sandblasted. The brackets will be coated with one coat of Devoe No. 304 Inorganic Zinc, 4 mil DFT immediately after sandblasting followed by one coat of Bar Rust 235. The brackets that are above the deck plates and any parts of the brackets not covered by pipe lagging will additionally be coated with two (2) coats of a good quality marine paint of the appropriate color and finish.
 - e. The effected areas surrounding the pipe brackets will be wired brushed clean, faired and will receive two (2) coats of Bar Rust 235 followed by the application of two (2) coats of a good quality marine paint of the appropriate color and finish.
 - f. If stainless steel brackets are fabricated then sandblasting and painting of the stainless steel parts will not be required.
- 20.2 <u>Payment</u>. All costs associated with fabricating, sandblasting, painting and installing the new pipe brackets and hardware will be included in the bid item for the work being performed.

21.0 RENEWAL of STEAM HEATING BOILER & SYSTEMS

- 21.1 <u>General</u>. This section will cover the renewal of the 15 pound steam boiler, the renewal of two (2) steam unit heaters and the design and installation of a forced hot water unit heater for heat to the main engine oil sump. This section will also cover the renewal of steam traps and various piping. The Contractor will be required to have the new boiler installed, plumbed, wired, tested and adjusted by a commercial boiler company.
- 21.2 <u>Description of Work</u>. The Contractor will have to carefully disconnect the piping, uptake, and wiring prior to removal. The old boiler will have to be removed in sections to fit through the 26 inch wide water tight hatch. The Contractor will dispose of the old boiler and other items removed during this renewal following all applicable laws. The existing pipe insulation is constructed of a <u>NON-Asbestos</u> insulating material. The Contractor will purchase a new Weil McLain model 680-S with a new Webster JB1-03 burner and have them installed by commercial boiler company. The new steam boiler will have two (2) tankless heater sections installed, one for the domestic hot water and one for the new 180 degree Fahrenheit hydronic forced hot water main engine heating loop. The Contractor will also renew the two (2) steam engine room unit heaters.
- 21.3 <u>Installation of New Steam Boiler</u>. The new Contractor supplied steam boiler will be installed in the same location as the one removed. The existing boiler is mounted on a steel plate that is elevated approximately 10 inches above the deck plates. This plate and foundation might need modifications to install the new boiler. The dry shipping weight of the new boiler is approximately 1850 pounds. The new boiler will be secured in a way to prevent undo stress on the piping and movement while the tug is underway. Once the old boiler is removed, this plate and foundation will be scraped clean, faired and coated as described in section 21.9 Preparation and Painting. Prior to the new steam boiler being installed the area of hull and bilge behind the boiler will also be mechanically cleaned, faired and coated as described in section 21.9 Preparation and Painting. The new boiler will be ordered with the sections unassembled and reassembled in the engine room by a qualified commercial boiler company. The new boiler will have all required breeching installed meeting all regulations and recommendations. The breeching will be of commercial quality and will be installed with all required cleanouts, barometric dampers and spill switch. The breeching will be covered with high temperature mineral wool. The existing safety handrail around the front of the boiler will need to be modified after the new boiler is installed. There is a heat exchanger mounted on the aft engine room bulkhead (Bulkhead 40) from an obsolete system that will have to be removed. The heat exchanger is approximately 30 inches long and 18 inches wide. The tank supports will be cut off and ground flush. The disturbed areas will be faired and receive the same coating applications as the area behind the boiler above the deckplates.

- 21.4 <u>Installation of Boiler Controls</u>. The factory assembled and wired control panel will be burner or remote mounted and will include the following:
 - a. Honeywell microprocessor flame safeguard control
 - b. Magnetic motor starters
 - c. Fuse blocks (for safety protection) circuit
 - d. Control transformer
 - e. Signal lights for power on, flame failure, ignition
 - f. Terminal strip for field wiring
 - g. Control cabinet directory with a professionally drawn wiring diagram of the burner system and associated wiring and the combustion test results

The new steam boiler will have a McDonnell Miller 150 low water cutoff and a McDonnell Miller 63M low water cutoff with a manual reset installed. The new steam boiler will be controlled with pressure switches to cut in and cut out the boiler. These pressure switches will consist of two (2) pressuretrols, one with manual reset and will be Honeywell Models L404A and L404C. The 120 VAC supply wiring to the boiler controls will be renewed in kind from the transfer switch mounted on the aft engine room bulkhead (Bulkhead 40) to the appropriate locations on the new boiler. The transfer switch has two sources one from the DC to AC motor generating set mounted on the aft bulkhead and one from the 120 VAC breaker panel. All wiring connections will be made in watertight junction boxes with terminal strips and ring type connectors no mid air splices or wire nuts will be used. All wiring will be properly supported with wire clamps and run in any available wire chases. All wiring will be done by a licensed electrician following all applicable laws.

21.5 Renewal of Boiler Piping. The new steam boiler will need to have new steam risers and a new steam header installed that are properly sized and designed per manufacturers instructions and recommendations. The remaining boiler steam piping and valves within four (4) feet of the boiler will also be renewed in kind. A new properly sized steam relief valve and relief piping will be installed in the appropriate location with the outlet piping ending 2 inches above the deckplates. The new boiler will have a bottom blowdown and two (2) low water cutout blowdowns installed from the new locations on the new boiler to the existing overboard gate and check valve at the hull. The blowdowns will be piped in the same material as the existing; which is schedule 40 red brass NPT pipe and fittings. In the existing steam system there was a tee in the steam supply and return lines with valves that went to an obsolete system that will be deleted in the new boiler installation. The fuel piping from the Racor fuel filter to the new burner will be renewed with the appropriate size pipe or tubing. The piping to the filter might need modifying if the Racor fuel filter is relocated from the boiler foundation. The boiler makeup water supply line will need to be renewed from the tee in the overhead potable water line to the appropriate location in the

condensate return header on the new boiler. The new boiler makeup water supply line will incorporate a new properly sized backflow preventer and a new bronze ball valve. Accommodations will be made in this line to fill the new 180 degree F hydronic main engine heating loop. There is a hose bib teed off the makeup water supply line that will be replaced in kind. The potable water supply line from the valve labeled "water to mixing valve" through the tankless heater up to first tee in the overhead will be renewed also. In addition, a new Watts mixing valve and relief valve will be installed in this line. In the outlet domestic hot water line after the mixing valve, there is a tee with a short piece of pipe ending in a hose spigot that will need to be renewed in kind. All new piping that transfer steam or hot water will be insulated with one (1) inch thick fiberglass pipe insulation of the appropriate size. All insulation will be covered with all service jacket and all fittings will be covered with Zeston coverings. All new piping will be properly supported with brackets fabricated as per section 20.0 New Pipe Brackets. If copper tubing is used in this boiler renewal it will be type "L" or better hard temper, copper refrigeration tubing will not be used except on the fuel lines.

21.6 Renewal of Two (2) Unit Heaters. The two (2) steam unit heaters in the engine room will need to be renewed. The forward engine room unit heater is a Trane horizontal delivery unit heater with a DC (direct current) fan motor. In its place a new Modine horizontal delivery unit heater of the same heat output and roughly the same dimensions will be installed. This heater will have an AC fan motor installed. The DC power wiring for this fan motor will be removed entirely back to breaker panel. The breaker panel is mounted on the forward bulkhead beside the starboard DC generator. The new forward engine room Modine unit heater will have new wiring installed from the AC breaker panel to the unit with a on/off switch mounted in convenient location. The new wiring will be sized for the motor and will be low smoke USCG approved. There are spare breakers installed in the AC breaker panel. The other unit heater needing renewal is mounted aft in the engine room above the propeller shaft. This unit heater is a vertical delivery unit heater with an AC fan motor. This heater will be renewed with a new Modine vertical delivery unit heater of the same heat output and roughly the same dimensions. The wiring for this unit heater will also be renewed with USCG approved low smoke marine wire of the appropriate size for the fan motor. The wiring will be renewed form the unit heater fan through a switch to the AC breaker panel. The piping within four (4) feet on both sides of these two (2) unit heaters will be renewed in kind and made water and vapor tight. The renewal of the unit heaters will also require changing out the bucket type steam traps to the appropriate sized Float and Thermostatic steam traps. The "Y' type steam strainers installed in the outlet of these two (2) unit heaters will also be renewed with new appropriate sized "Y" type strainer. There will be two (2) new unions installed in each of the two (2) unit heater return lines; one union ahead of the new "Y" type strainer and one after the new Thermostatic and Float steam trap. In addition the vertical delivery Modine unit heater mounted in the Crews Quarters will need to have the

bucket type steam trap changed out to the appropriately sized Float and Thermostatic steam trap. The return line piping within four (4) feet of the Crews Quarters unit heater will be renewed in kind and made water and vapor tight. The Crews Quarters Modine heater will also require a new "Y" type strainer and two (2) unions installed in the same manner as previously mentioned. The new pipe and fittings installed in this section will be of the same schedule and material as the existing piping to these unit heaters. The new piping will be properly supported and insulated as previously mentioned in section 21.5 Renewal of Boiler Piping.

- 21.7 Design and Installation of Main Engine Heating Loop. In this section the Contractor with the aid of a commercial boiler company will design and install a new heating loop for the main engine. The system design will need to be approved by the COR before installation. The system will take 180 degree Fahrenheit heated water form the second tankless heater installed in the new steam boiler and pump it to a horizontal delivery Modine unit heater. The unit heater will be sized to fit in the bilge under the main engine output shaft forward of the hydraulic gearbox. The heater will be directed forward to force as much heated air to the undersides of the main engine oil sump. The new unit heater will have an AC sealed explosion proof motor. The unit heater will also be installed with ball valves and unions on the supply and return lines installed as close to the heater as possible to ease in the installation and removal of the unit heater from the bilge. The heated water circulation pump will be properly sized and of a type that is commonly available. There will also be ball valves installed before and after the circulator pump to ease in removal and replacement when necessary. The pump will be mounted properly in an accessible location. The system will also incorporate a way to fill and drain the complete system and a way to indicate that the system is completely full of water. If copper tubing is used in this design it will be type "L" or better hard temper, copper refrigeration tubing will not be used. The new Modine unit heater will have an AC fan motor with an on/off switch mounted in a convenient location. The circulator pump will also have an on/off switch mounted in a convenient location. The fan motor and circulating pump will both lead into a watertight junction box mounted in a convenient location and will be fed from the AC main breaker panel. The new wiring will be sized for the motor and circulator and will be low smoke USCG approved. All wiring connections will be made in watertight junction boxes with terminal strips and ring type connectors no mid air splices or wire nuts will be used. All wiring will be properly supported with wire clamps and run in any available wire chases. All wiring will be done by a licensed electrician following all applicable laws.
- 21.8 <u>Testing and Adjustment of New Boiler and Associated Systems</u>. Once the new steam boiler, piping, unit heaters, and new main engine heating loop are installed the system will be test fired and adjusted. The tests and adjustments will be made by a qualified commercial boiler company with the COR present. Any

failure of the tests will be repaired and retested at the expense of the Contractor until repairs and tests are satisfactory. The COR will witness all repairs and tests.

- Preparation and Painting. The boiler mounting plate, boiler foundation, area of hull and bilge behind the boiler and the new non insulated piping installed will receive two (2) coats of Bar Rust 235, 6 mils DFT. The first application will be Gray and the second application will be Oxide Red. The piping, fittings and the areas above the deck plates will then receive two (2) coats Amercoat 5450 White Gloss 4 mils DFT. If copper tubing is used, it will not be painted. Any disturbed areas during the renewal of the steam heating boiler and associated systems will be faired, prepared, and receive two (2) coats of Bar Rust 235, 6 mil DFT. The first application will be Gray and the second application will be Oxide Red. The disturbed areas above the deck plate level will then be top coated with two (2) coats of Amercoat 5450 of the appropriate color and finish, 4 mils DFT. The surface coatings will be applied in a manner as described in section 7.0 Application of Paint and/or Surface Coatings.
- 21.10 <u>Payment</u>. All costs associated with this section will be included in the bid item <u>28</u> Renewal of Steam Heating Boiler and Systems.

22.0 FABRICATION & INSTALLATION OF DRIP PANS

22.1 General. There are two systems that are 50+ year old mounted in the overhead that have many small drips dropping from them onto the deck and machinery below them. These systems are the forward steering systems and the capstan oil sump. The oil drips pose a slipping hazard and repairs attempted to stop them have failed so drip pans will need to be fabricated to catch the drips of oil. The drip pans will be fabricated of 1/16 inch thick 316 stainless steel. The drip pans will be fabricated with removable supports mounted to the overhead. The drip pans will have 1 inch high sides and will be 46 inches by 24 inches for the pan under the steering system and 34 inches by 54 inches for the one under the capstan. The sides will be folded so they are perpendicular with the bottom of the pan. The seams at the corners will be welded 100 % and made watertight. The sides of the drip pan will be fabricated free of sharp engines to prevent cuts during cleaning. The two (2) new drip pans will have small creases in the bottom to direct the flow of drips to a centrally mounted drain. From the drain 3/8 inch copper refrigeration will be neatly led outboard to the hull longitudinal where they will terminate into a drip can. The supports for these drip pans will be constructed of 1/8 inch by 3/4 inch stainless steel flat stock welded to the drip pans and bolted to tabs welded in the overhead. The drip pans will be mounted at an elevation to clear all obstructions. If the location where a support is needed and there is not a clear location to the overhead or if it is impossible to weld a tab to the overhead due to limited access then the support can be bolted to the actual

unit (steering system, capstan). The hardware for the support brackets will be 316 stainless steel hex head bolts with flat washers and nylon locknuts. The drip pans will have a minimum of six (6) supports per drip pan. On completion and installation of the drip pans, the Contractor will have the missing exhaust blankets fabricated and installed on the starboard DC generator. The exhaust blankets will be fabricated of the same material as the existing. The area to be covered with exhaust blankets is approximately 6 feet.

- 22.2 <u>Tests</u>. The welds at the corner seams of the drip pans will be tested. The test will consist of plugging the drain and filling the drip pans with water for 30 minutes and checking the seams for leaks. Any leaks will be repaired and retested at the expense of the Contractor until repairs and tests are satisfactory. The COR will witness all repairs and tests.
- 22.3 <u>Preparation and Painting</u>. The stainless steel drip pans and the stainless steel supports will not need surface coatings applied to them. Any disturbed areas during the installation of drip pans will be faired, prepared, and receive two (2) coats of Bar Rust 235, 6 mil DFT. The first application will be Gray and the second application will be Oxide Red. The disturbed areas will then be top coated with two (2) coats of Amercoat 5450 of the appropriate color and finish, 4 mils DFT. The surface coatings will be applied in a manner as described in section 7.0 Application of Paint and/or Surface Coatings.
- 22.4 <u>Payment</u>. All costs associated with this section will be included in the bid item <u>29</u> Fabrication and Installation of Drip Pans.

23.0 INSTALLATION OF PORT DC GENERATOR G.F.E. SEA STRAINER

23.1 General. The port DC generator duplex sea strainer will need to be renewed with a G.F.E. bronze duplex sea strainer. The new strainer will be mounted on a new support bracket and be installed in the same general area as the existing. The strainer has two sources for its suction of water. One is the sea chest and the other is the forward ballast tank. To accommodate the new GFE duplex strainer the existing suction piping will need renewal. The DC generator sea chest suction valve WILL NOT require renewal. The new piping and fittings will be new schedule 40 galvanized, 1 ¼ inch NPT unless otherwise noted (reducing bushings). The length and routing of the piping being renewed might change slightly due to the exact location of the new strainer is not known. The renewal will start from the 1 ½ inch flanged sea chest valve with a 1 ½ inch NPT threaded 4 bolt flange. In this threaded flange there is a 1 ½ inch NPT reducing bushing that reduces the piping down to 1 ¼ inch NPT. From the reducing bushing the 1 ¼ inch NPT piping runs approximately 6 inches with nipples and an 90 degree elbow to a "T". At this "T" the forward ballast tank suction is led into the suction line to the strainer through 1 ¼ inch NPT gate valve. This 1 ¼

inch NPT gate valve will be renewed in kind. The renewal of the forward ballast line will start at this "T" and continue to the 90 degree elbow after the first union in the bilge leading twartship. The ballast tank suction renewal is approximately 6 feet of 1 1/4 inch NPT pipe and fittings. From the "T" at the sea chest valve the renewal will continue up to the strainer. This will consist of approximately 30 inches of 1 1/4 inch NPT pipe and fittings. The flanges on the pipe at the existing strainer will not be needed in the new installation since the new strainer inlet and outlet are 1 1/4 inch NPT. There will be two (2) unions installed one on the inlet to the duplex strainer and one on the outlet from the strainer. From the new duplex strainer the renewal will run up and aft to the raw water pump approximately 6 feet. The piping from the strainer to the raw water pump then terminates in a short piece of Aeroquip hose. The Aeroquip hose is approximately 12 inches long with male 1 ¼ inch NPT ends. This hose will be renewed with new Aeroquip suction hose but with 37 degree brass or stainless steel JIC swivel connectors. The hose and connectors will be rated for saltwater suction service. The 1 1/4 inch NPT pipe to 37 degree JIC adapters needed on both sides of the hose will be either brass or stainless steel. After the hose the renewal will continue up to the raw water pump 1 ½ inch NPT adapter. There is a 1 ½ inch to 1 ¼ inch NPT bushing into this adapter that will need to be renewed in kind. All pipe and fittings will be sealed with Loctite PST 592 joint sealant. The new piping will be properly supported with new pipe brackets fabricated as per section 20 New Pipe Brackets.

- 23.2 <u>Testing</u>. The new strainer, piping, and fittings will be tested once the vessel is waterborne and the generator is able to run. The test will consist of running the generator at operating speed on both the sea chest and forward ballast tank suctions. Any leaks found in the new work and the existing piping where the new work is connected to will be repaired and retested at the expense of the Contractor until repairs and tests are satisfactory. The COR will witness all repairs and tests.
- 23.3 Preparation and Painting. The new duplex strainer support bracket will be sand blasted to white metal prior to the application of surface coatings. After sand blasting the duplex support strainer bracket will be coated with Devoe, No. 304, inorganic zinc paint, 3 to 5 mils DFT. The new duplex strainer support bracket, piping and fittings will be prepared for surface coatings and receive two (2) coats of Bar Rust 235, 6 mils DFT. The first application will be Gray and the second application will be Oxide Red. The piping, fittings and the areas above the deck plates will then receive two (2) coats Americant 5450 White Gloss 4 mils DFT. Any disturbed areas during the installation of the new duplex sea strainer will be faired, prepared, and receive two (2) coats of Bar Rust 235, 6 mil DFT. The first application will be Gray and the second application will be Oxide Red. The disturbed areas above the deck plate level will then be top coated with two (2) coats of Americant 5450 of the appropriate color and finish, 4 mils DFT. The surface

coatings will be applied in a manner as described in section <u>7.0</u> Application of Paint and/or Surface Coatings.

- 23.3 <u>Payment</u>. All costs associated with this section will be included in the bid item <u>30</u> Installation of Port DC Generator G.F.E. Sea Strainer.
- 24.0 RENEWAL OF POTABLE WATER PUMP & CAPTIVE AIR TANKS
- 24.1 General. The potable water pump and captive air tanks are 25 + years old and need to be renewed. There are two (2) potable water pumps and two (2) captive air tanks. The potable water pumps are belt driven Myers pumps. One is driven by a DC motor and the other is driven by an AC motor. The one requiring renewal is the top one which is the AC motor driven one. The Myers pump removed will remain property of the US Army Corps of Engineers for parts. The lower DC motor driven pump might need to be moved to accommodate the new steam boiler. If the DC motor driven Myers pump is moved it will be remounted in the same manner. The new AC potable water pump will be a Goulds shallow well jet pump model J5SH with a ½ horsepower AC motor. The new pump has a 1 ¼ inch NPT inlet and 1 inch NPT outlet. The new pump renewal might require slight modifications to the support bracket. A new pressure switch will need to be purchased and installed in an accessible location. The new pressure switch will be factory preset on at 30 PSI and off at 50 PSI. The existing pressure switch and box will be removed. The two (2) new captive air tanks will be Goulds model number V45 with a 1 inch NPT female connection. The new captive air tanks will be installed in the same locations with brackets securing the top and bottom of each tank. The existing location of the captive air tanks is limited so slight modifications of the support shelves might be required. The existing captive air tanks are approximately 24 inches high and 16 inches in diameter. The new captive air tanks are 24 15/16 inches high and 15 3/8 inches in diameter.
- 24.2 Renewal of Potable Water System Piping. Since the location of the new pump and the possibility that the DC motor driven pump might need to be moved parts of the potable water suction and discharge piping will need to be renewed. The piping and fittings installed in this renewal will be galvanized schedule 40 with National Pipe Threads of the appropriate size unless otherwise noted. The pipe and fitting joints in this renewal will be sealed with Loctite PST 592. The renewal will begin at the cupro-nickel 1 ¼ inch NPT suction pipe that ends at the deck plate level beside the DC motor driven potable pump. At the transition from the cupro-nickel pipe to galvanized pipe the existing pipe is reduced down to 1 inch pipe and is teed off to each pump with 1 inch gate valves. The new pump requires a 1 ¼ inch NPT inlet so the reducing bushing will be eliminated until after the "T" to the existing DC driven pump. The existing DC driven pump requires a 1 inch NPT suction line so a reducing "T" or Reducing bushing will need to be installed.

The existing inlet piping and fittings is approximately 5 feet. The existing outlet piping and fittings from the pumps needing renewal is approximately 26 feet. The existing pump discharge piping is 34 inch NPT this will be increased during this renewal to 1 inch NPT to accommodate the outlet of the new pump. The discharge piping is teed off to the following three locations: boiler feed and domestic hot water tankless heater supply, cold water supply to the port side, cold water supply to the starboard side. The renewal of the potable water discharge piping will end at the "T" in the boiler feed line that is mentioned in the boiler renewal section. The renewal will end at the 1 1/4 inch NPT pipe leading to the cold water lines on the starboard side. The renewal will end at the 1 ¼ inch NPT pipe that supplies the cold water to the port side. The existing DC motor driven pump has a ¾ inch NPT outlet that will need to be increased with a bell or bushing to 1 inch NPT. In the new potable water system, unions will be installed on both sides of each pump and on the inlet to each of the captive air tanks. The new system will also incorporate check vales on the outlets of each pump. New bronze or stainless steel full port ball valves will be installed during this renewal in the following locations: suction to each pump; two (2) 1 1/4 inch NPT full port ball valves, discharge from each pump; two (2) 1 inch NPT full port ball valves, captive air tanks; two (2) 1 inch NPT full port ball valves, boiler feed and domestic hot water tankless heater supply; one (1) 1 inch NPT full port ball valve, cold water supply to the port side; one (1) 1 inch NPT full port ball valve, cold water supply to the starboard side; one (1) 1 inch NPT full port ball valve. The pressure relief valves will also be renewed in kind with the relieving outlets terminating 2 inches above the deck plate level. The ¼ inch copper refrigeration tubing for the two potable water pumps pressure switches will also be renewed in kind. The two pressure gauges that are teed off the captive air tanks will be renewed with new 0-100 PSI gauges, shock snubbers and ball valves. A drain will be installed in the lowest portion of the discharge piping to ease in draining the system when repairs are necessary. The drain line will have a hose bib installed in a manner so a garden hose can be attached. The piping renewed in this section will be adequately supported with new pipe brackets as per section 20.0 New Pipe Brackets.

- New Pump Wiring Renewal. The potable water pump will require the renewal of the old wiring from the pump back to the AC breaker panel. There is an old local switch box that was used for the existing AC pump that will be removed entirely. The new wiring will be sized for the motor and will be low smoke USCG approved. All wiring connections will be made in watertight junction boxes with terminal strips and ring type connectors no mid air splices or wire nuts will be used. All wiring will be properly supported with wire clamps and run in any available wire chases. All wiring will be done by a licensed electrician following all applicable laws.
- 24.4 <u>Preparation and Painting</u>. While the AC and DC potable water pumps and the captive air tanks are removed during this renewal the area of the hull behind them will be mechanically cleaned, faired and

prepared for surface coatings. The support brackets for the new potable pump and captive air tanks will be sanded, faired and prepared for the application of surface coatings. The area of the hull behind the potable water pumps and captive air tanks, new potable water pump and captive air tank brackets, fittings, and piping will receive two (2) coats of Bar Rust 235, 6 mils DFT. The first application will be Gray and the second application will be Oxide Red. The area of the hull behind the potable water pumps and captive air tanks, new potable water pump and captive air tank brackets, fittings, and piping above the deck plates will then receive two (2) coats Amercoat 5450 White Gloss 4 mils DFT. Any disturbed areas during the installation of the new potable water pump and captive air tanks will be faired, prepared, and receive two (2) coats of Bar Rust 235, 6 mil DFT. The first application will be Gray and the second application will be Oxide Red. The disturbed areas above the deck plate level will then be top coated with two (2) coats of Amercoat 5450 of the appropriate color and finish, 4 mils DFT. The surface coatings will be applied in a manner as described in section 7.0 Application of Paint and/or Surface Coatings.

24.5 <u>Payment</u>. All costs associated with this section will be included in the bid item <u>31</u> Renewal of Potable Water Pump and Captive Air Tanks.

25.0 PAINTING OF INTERIOR DECKS

- 25.1 General. The following interior compartment decks will be surface prep sanded with 80 grit paper on a orbital or palm sander to a clean smooth surface. After sanding the decks will be cleaned to remove all dust and sanding grit. Prior to painting, the decks will be wiped down with a compatible cleaning solvent. The deck paint will be brought up 6 inches to a straight taped line along the bulkheads to form a uniform kick plate on all interior decks listed to be painted.
- 25.2 The following is a list and approximate size of the interior compartment decks to be prepped and painted.
 - a. Lower forward crew quarters deck. 406 sq. ft.
 - b. Stairway leading down to lower forward crew quarters. 45 sq. ft.
 - c. Captain and Engineers state rooms. 92 sq. ft.
 - d. Passageway leading from staterooms to Mess Deck. 75 sq. ft.
 - e. Officers Washroom including shower deck. 27 sq. ft.
 - f. Mess Deck. 126 sq. ft.
 - g. Galley Deck. 90 sq. ft.
 - h. Fiddly Deck. 42 sq. ft.
- 25.3 After cleaning the interior decks will receive the following paint applications.
 - a. 1st application, Devoe, No. 235, multi purpose epoxy paint, I.M. gray, 4 to 6 mil. D.F.T.
 - b. 2nd application, Devoe, No. 235, multi purpose epoxy paint, Haze gray, 4 to 6 mil. D.F.T.

25.4 <u>Payment</u>. All costs associated with this section will be included in the bid item <u>32</u> Painting of Interior Decks.

26.0 REPAIR OF STEERING GEAR COVER & RENEWAL OF GRATINGS

- General. The existing steering gear cover that is located on the aft deck is deteriorated and needs to be repaired. The steering gear cover consists of a ¼ inch steel box welded to the deck with a removable ¼ inch steel cover. Above the steering box cover there are steel bar gratings installed. These steel bar gratings will be removed and disposed of and in there place new fiberglass bar grating will be installed. The cover and gratings will be removed and installed during the rudder removal as mentioned and bid in section 9.0 Rudder Removal, Reinstallation, and Testing. The deck areas under the gratings, steering box cover interior and exterior and bulwarks in this area will be prepared for paint and painted.
- 26.2 Repairs to Steering Gear Cover. The ¼ inch thick, 1½ inch by 1½ inch angle iron bolting flange is badly deteriorated on the fixed part of the box and will require complete renewal. The renewal will entail the complete removal of the existing angle iron and installation of new pieces. The new pieces will be mitered in the same manner as the existing. The new pieces will be welded 100 %. Care will be taken to prevent warping of fixed part of box and removable cover during this renewal. The approximate lineal length of the ¼ inch thick 1½ inch by 1½ inch angle iron requiring renewal is 25¼ feet. There is a small part of the bolting angle iron on the removable portion of the cover that will require renewal. This part is the forward section of the cover and is approximately 11 feet long of 1/4 inch thick 1 1/2 inch by 1 1/2 inch angle iron. This renewal will be done in the same manner as the lower bolting flange mentioned above. Prior to installation of the new bolting flanges the angle irons will be sand blasted to white metal prior to the application of surface coatings. After sand blasting the new bolting flanges will be coated with Devoe, No. 304, inorganic zinc paint, 3 to 5 mils DFT. The removable cover is held in place with 3/8 inch bolts thru bolted on 12 inch centers. Once the repairs to the bolting flange are completed, new holes will be drilled on 6 inch centers and centerline on the bolting flange. The existing bolt holes in the removable cover can be reused. There are a few bolt holes that are drilled too close to the box cover that do not allow for the proper installation of hardware. These bolt holes will need to have plugs welded in and new holes drilled. The new hardware for the removable cover will be 3/8 inch 316 stainless steel and will consist of the appropriate length hex head bolts with two (2) flat washers (1 under head of bolt and 1 under nut), lock washers and nuts. The gaskets for the removable cover are previously bid in section 9.0 Rudder Removal, Reinstallation, and Testing. There are four handles welded on the removable cover, which has proven to be inadequate for ease in removal. The Contractor will need to add eight (8) more handles fabricated in the same manner as the existing from ½ inch round stock. Four (4) new handles will

be installed on the 11 foot side of the removable cover, two on each side of the centerline existing handle. The other four (4) handles will be installed two (2) per side on the 50 inch sides (where there are currently none). The new handles will be mounted in a manner to allow access to the flange hardware. The three access covers on the removable cover will also need to be removed and all the studs renewed with stainless studs of the appropriate length and size. If the studs are welded, the new stainless studs will be welded in the same locations. If the studs are tapped then the broken studs will be drilled out and the holes retapped. The access covers will be reinstalled with new 1/4 inch cloth inserted neoprene rubber gasket material. Two of the access covers are round and 18 inches in diameter. The other access cover is square and approximately 29 inches on each side. The access covers hardware will consist of the appropriate size 316 stainless steel flat washers, lock washers, and nuts. The access cover to the follow up wire sheaves located on the starboard outboard side will also be removed and reinstalled with new gaskets of the same type as mentioned above will be installed. The sheaves access cover will be installed with new 316 stainless steel hardware, consisting of the appropriate size and length hex head bolts with two (2) flat washers (1 under head of bolt and 1 under nut), lock washers and nuts. Once all the work mentioned in this section and in section 9.0 Rudder Removal, Reinstallation, and Testing are complete all access covers and the removable cover will be reinstalled and made water tight.

26.3 Renewal of Gratings. The area above the steering ram cover is covered with steel bar gratings and in the corners plywood, that will be removed and disposed of. In their place new fiberglass bar gratings will be installed. The gratings cover an area in the shape of a half circle with the flat side having a length of approximately 16 feet and the radius of approximately 7 feet. The grating is supported by 1/4 inch thick 1 ½ inch by 1½ inch angle iron around the entire perimeter. The new fiberglass bar grating will need to have a new support structure added twartship to shorten the span of the grating. The new grating support structure will be fabricated in a manner that is removable. This support structure will consist of \(\frac{1}{4} \) inch 2 inch wide steel flat bar approximately 14 feet in length, mounted 2 inches aft of the steering gear cover. The flat bar will have three (3) support legs to the deck that are approximately 23 inches in length. The support legs will be mounted with one centerline and the other two will be evenly spaced on either sides of the centerline one. The three (3) support legs will be constructed of ¼ inch 1 ½ inch by 1 ½ inch angle iron only welded to the 2 inch flat bar. The support legs will be bolted to tabs welded to the deck. The tabs will be constructed of the same material as the support legs. The flat bar will attach to the existing grating support structure with a bolting arrangement so the 2 inch flat bar is flush with the existing grating support structure. The three (3) support legs and the flat bar support will be attached with a minimum of two (2) bolts at each point. The hardware will consist of 316 stainless steel 3/8 inch hex head bolts of the appropriate length, flat washers, lock washers, and nuts. Once the new removable support structure is fabricated, it will be sandblasted to white metal and coated with Devoe, No. 304, inorganic zinc paint, 3 to

5 mils DFT. It will then have the surface coatings applied as mentioned below in section 26.4 Preparation and Painting. The new grating will be fiberglass bar grating for harsh environments with a knobbed surface 1½ inch thick. The opening size will 1½ inches by 1½ inches with a minimum uniform load rating of 375 pounds over a three foot span. It will be the same or better quality than the fiberglass bar grating listed in the McMaster-Carr online catalog page 1922, style "B", part number 6253T35. The new fiberglass bar gratings will be ordered or cut so they are 2 feet wide. The new grating will be cut to the appropriate length and radius to fit into the existing support structure. The new gratings will be cut so they are not to snug or to loose. All cut ends will be sealed with a resin sealer to protect from water absorption. The new gratings will be held in place with 316 stainless steel fiberglass grating fasteners without "C" clips and a ¼-20 316 stainless steel hex head bolt. The ¼-20 bolts will be bolted into tapped holes in the support structure. The new gratings will be held down with a minimum of one (1) clip per corner and two (2) into the new removable twartship support.

Preparation and Painting. The entire area under the new deck gratings will be prepared for paint and 26.4 painted while the grating and access covers are removed. The areas include the following: interior and exterior of steering box cover, deck inside of steering gear box cover, the grating angle iron support structure, the removable cover inside and out, the steering rams supports, steering quadrant, hydraulic lines, the deck area below the gratings, the bulwarks, the bulwarks stays, both sides of the access covers on the removable cover, the follow up wire sheave box interior and exterior, the deck inside the follow up wire sheave box, and both sides of the access cover to the follow up wire sheave box. The removable steering gear box cover, new removable grating twartship support and all four (4) access covers will be sand blasted on all sides to white metal prior to the application of surface coatings. After sand blasting the removable steering gear box cover, new removable grating twartship support and all four (4) access covers will be coated with Devoe, No. 304, inorganic zinc paint, 3 to 5 mils DFT. The areas listed above will be mechanically cleaned to remove rust and loose paint. These areas will then be faired to existing surfaces and prepared for surface coatings. These areas listed above will then receive two (2) coats of Bar Rust 235, 6 mils DFT. The first application will be Gray and the second application will be Oxide Red. The areas inside the steering gear box will need to be degreased as mentioned in section 9.0 Rudder Removal, Reinstallation, and Testing. The actual steering rams, seals, follow up wires and sheaves will be covered and protected during this evolution and WILL NOT be painted. The grease fittings WILL NOT be painted. Care will be taken while cleaning the steel hydraulic lines. The Contractor will use care while working in the area around the steering gear. Any damage to the steering gear will be repaired at the Contractor's expense. The surface coatings will be applied in a manner as described in section 7.0 Application of Paint and/or Surface Coatings.

26.5 <u>Payment</u>. All costs associated with this section will be included in the bid item <u>33</u> Repair of Steering Gear Cover & Renewal of Gratings.

Section E - Inspection and Acceptance

CLAUSES INCORPORATED BY FULL TEXT

52.246-4 INSPECTION OF SERVICES--FIXED-PRICE (AUG 1996)

- (a) Definitions. "Services," as used in this clause, includes services performed, workmanship, and material furnished or utilized in the performance of services.
- (b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.
- (c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all times and places during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.
- (d) If the Government performs inspections or tests on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, at no increase in contract price, all reasonable facilities and assistance for the safe and convenient performance of these duties.
- (e) If any of the services do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, at no increase in contract amount. When the defects in services cannot be corrected by reperformance, the Government may (1) require the Contractor to take necessary action to ensure that future performance conforms to contract requirements and (2) reduce the contract price to reflect the reduced value of the services performed.
- (f) If the Contractor fails to promptly perform the services again or to take the necessary action to ensure future performance in conformity with contract requirements, the Government may (1) by contract or otherwise, perform the services and charge to the Contractor any cost incurred by the Government that is directly related to the performance of such service or (2) terminate the contract for default.

(End of clause)

252.246-7000 MATERIAL INSPECTION AND RECEIVING REPORT (MAR 2003)

- (a) At the time of each delivery of supplies or services under this contract, the Contractor shall prepare and furnish to the Government a material inspection and receiving report in the manner and to the extent required by Appendix F, Material Inspection and Receiving Report, of the Defense FAR Supplement.
- (b) Contractor submission of the material inspection and receiving information required by Appendix F of the Defense FAR Supplement by using the Wide Area WorkFlow-Receipt and Acceptance (WAWF-RA) electronic form (see paragraph (b)(1) of the clause at 252.232-7003) fulfills the requirement for a material inspection and receiving report (DD Form 250).

(End of clause)

Section F - Deliveries or Performance

CLAUSES INCORPORATED BY FULL TEXT

52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

The Contractor shall be required to (a) commence work under this contract within five (5) calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than thirty (30) calendar days after receipt of notice to proceed. The time stated for completion shall include final cleanup of the premises.

(End of clause)

52.247-34 F.O.B. DESTINATION (NOV 1991)

- (a) The term "f.o.b. destination," as used in this clause, means--
- (1) Free of expense to the Government, on board the carrier's conveyance, at a specified delivery point where the consignee's facility (plant, warehouse, store, lot, or other location to which shipment can be made) is located; and
- (2) Supplies shall be delivered to the destination consignee's wharf (if destination is a port city and supplies are for export), warehouse unloading platform, or receiving dock, at the expense of the Contractor. The Government shall not be liable for any delivery, storage, demurrage, accessorial, or other charges involved before the actual delivery (or "constructive placement" as defined in carrier tariffs) of the supplies to the destination, unless such charges are caused by an act or order of the Government acting in its contractual capacity. If rail carrier is used, supplies shall be delivered to the specified unloading platform of the consignee. If motor carrier (including "piggyback") is used, supplies shall be delivered to truck tailgate at the unloading platform of the consignee, except when the supplies delivered meet the requirements of Item 568 of the National Motor Freight Classification for "heavy or bulky freight." When supplies meeting the requirements of the referenced Item 568 are delivered, unloading (including movement to the tailgate) shall be performed by the consignee, with assistance from the truck driver, if requested. If the contractor uses rail carrier or freight forwarded for less than carload shipments, the contractor shall ensure that the carrier will furnish tailgate delivery, when required, if transfer to truck is required to complete delivery to consignee.
- (b) The Contractor shall--
- (1)(i) Pack and mark the shipment to comply with contract specifications; or
- (ii) In the absence of specifications, prepare the shipment in conformance with carrier requirements;
- (2) Prepare and distribute commercial bills of lading;
- (3) Deliver the shipment in good order and condition to the point of delivery specified in the contract;
- (4) Be responsible for any loss of and/or damage to the goods occurring before receipt of the shipment by the consignee at the delivery point specified in the contract;
- (5) Furnish a delivery schedule and designate the mode of delivering carrier; and
- (6) Pay and bear all charges to the specified point of delivery.

(End of clause)

Section H - Special Contract Requirements

CLAUSES INCORPORATED BY REFERENCE

252.217-7003	Changes	DEC 1991
252.217-7004	Job Orders and Compensation	DEC 1991
252.217-7005	Inspection and Manner of Doing Work	JAN 1997
252.217-7006	Title	DEC 1991
252.217-7007	Payments	DEC 1991
252.217-7009	Default	DEC 1991
252.217-7010	Performance	DEC 1991
252.217-7011	Access to Vessel	DEC 1991
252.217-7012	Liability and Insurance	AUG 2003
252.217-7013	Guarantees	DEC 1991
252.217-7014	Discharge of Liens	DEC 1991
252.217-7015	Safety and Health	DEC 1991
252.217-7016	Plant Protection	DEC 1991
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MASTER AGREEMENT

MASTER AGREEMENT FOR REPAIR AND ALTERNATION OF VESSELS (To be completed upon award of contract.)

(1) This agreement is entered into this day of	, 2004, by the United States of America (the
"Government") represented by	, the Contracting Officer, and
(the "Contractor").	

- (2) The clauses in this agreement shall be incorporated, by reference or attachment, in job orders issued under this agreement to effect repairs, alternations, and/or additions to vessels.
- (3) By giving 30 days written notice, either party to this agreement has the right to cancel it without affecting the rights and liabilities under any job order existing at the time of cancellation. The Contractor shall perform, under the terms of this agreement, all work covered by any job order awarded before the effective date of the cancellation.
- (4) This agreement may be modified only by mutual agreement of the parties. A modification of this agreement shall not affect any job order in existence at the time of modification, unless the parties agree otherwise.
- (5) The rights and obligations of the parties to this agreement are set forth in this agreement and the clauses of any job orders issued under this agreement. In the event there is an inconsistency between this agreement and any job order, the provisions of this agreement shall govern.
- (6) This agreement shall remain in effect until cancelled by either party.

THE UNITED STATES OF AMERICA
By
Contracting Officer

INSURANCE

In accordance with Contract Clause 252.217-7012, Liability and Insurance, of the Master Agreement for Repair and Alteration of Vessels, insurance shall be maintained in the amount of \$300,000.00. Evidence of said insurance coverage shall be furnished to the Contracting Officer prior to commencement of work under this contract.

LIQUIDATED DAMAGES

The amount of liquidated damages referred to in Contract Clause 252.217-7009, Default, of the Master Agreement for Repair and Alternation of Vessels, is \$1,116.21 per day for the vessels. For the purpose of computing liquidated damages, the Contracting officer will calculate time in thirds of a twenty-four hour day, beginning at midnight.

ENGINEERING AND WORK DRAWINGS

The Contractor shall perform all engineering functions specified herein. This work shall include, but is not necessarily limited to preparation of working drawings, development of bills of materials, making design calculations, planning and laying out systems, and preparation of testing procedures. The cost of all engineering and drafting effort shall be included in the contract price.

Section I - Contract Clauses

CLAUSES INCORPORATED BY REFERENCE

52 202 1	D (" '.'	HIN 2004
52.202-1	Definitions	JUN 2004
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
52.203-6	Restrictions On Subcontractor Sales To The Government	JUL 1995
52.203-7	Anti-Kickback Procedures	JUL 1995
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal	JAN 1997
	or Improper Activity	
52.203-10	Price Or Fee Adjustment For Illegal Or Improper Activity	JAN 1997
52.203-12	Limitation On Payments To Influence Certain Federal	JUN 2003
	Transactions	
52.204-4	Printed or Copied Double-Sided on Recycled Paper	AUG 2000
52.204-7	Central Contractor Registration	OCT 2003
52.209-6	Protecting the Government's Interest When Subcontracting	JUL 1995
	With Contractors Debarred, Suspended, or Proposed for	
	Debarment	
52.214-29	Order Of PrecedenceSealed Bidding	JAN 1986
52.219-8	Utilization of Small Business Concerns	MAY 2004
52.222-1	Notice To The Government Of Labor Disputes	FEB 1997
52.222-3	Convict Labor	JUN 2003
52.222-4	Contract Work Hours and Safety Standards Act - Overtime	SEP 2000
	Compensation	
52.222-21	Prohibition Of Segregated Facilities	FEB 1999
52.222-26	Equal Opportunity	APR 2002
52.222-35	Equal Opportunity For Special Disabled Veterans, Veterans	DEC 2001
	of the Vietnam Era, and Other Eligible Veterans	
52.222-36	Affirmative Action For Workers With Disabilities	JUN 1998
52.222-37	Employment Reports On Special Disabled Veterans,	DEC 2001
	Veterans Of The Vietnam Era, and Other Eligible Veterans	
52.222-41	Service Contract Act Of 1965, As Amended	MAY 1989
52.222-44	Fair Labor Standards And Service Contract Act - Price	FEB 2002
	Adjustment	
52.223-3	Hazardous Material Identification And Material Safety Data	JAN 1997
52.223-6	Drug-Free Workplace	MAY 2001
52.223-14	Toxic Chemical Release Reporting	AUG 2003
52.225-13	Restrictions on Certain Foreign Purchases	DEC 2003
52.226-1	Utilization Of Indian Organizations And Indian-Owned	JUN 2000
32.220 1	Economic Enterprises	3011 2000
52.227-1	Authorization and Consent	JUL 1995
52.229-3	Federal, State And Local Taxes	APR 2003
52.232-1	Payments	APR 1984
52.232-8	Discounts For Prompt Payment	FEB 2002
52.232-9	Limitation On Withholding Of Payments	APR 1984
	<u> </u>	
52.232-11 52.232-17	Extras Interest	APR 1984
		JUN 1996
52.232-23 Alt I	Assignment of Claims (Jan 1986) - Alternate I	APR 1984
52.232-33	Payment by Electronic Funds TransferCentral Contractor	OCT 2003
50 022 1	Registration	ии 2002
52.233-1	Disputes	JUL 2002

52.233-3	Protest After Award	AUG 1996
52.237-2	Protection Of Government Buildings, Equipment, And	APR 1984
	Vegetation	
52.242-13	Bankruptcy	JUL 1995
52.244-6	Subcontracts for Commercial Items	MAY 2004
52.245-2	Government Property (Fixed Price Contracts)	MAY 2004
52.246-1	Contractor Inspection Requirements	APR 1984
52.246-25	Limitation Of LiabilityServices	FEB 1997
52.248-1	Value Engineering	FEB 2000
52.253-1	Computer Generated Forms	JAN 1991
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7001	Prohibition On Persons Convicted of Fraud or Other	MAR 1999
	Defense-Contract-Related Felonies	
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.209-7004	Subcontracting With Firms That Are Owned or Controlled	MAR 1998
	By The Government of a Terrorist Country	
252.223-7004	Drug Free Work Force	SEP 1988
252.225-7031	Secondary Arab Boycott Of Israel	APR 2003
252.231-7000	Supplemental Cost Principles	DEC 1991
252.243-7001	Pricing Of Contract Modifications	DEC 1991
252.247-7023	Transportation of Supplies by Sea	MAY 2002

CLAUSES INCORPORATED BY FULL TEXT

52.222-42 STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (MAY 1989)

In compliance with the Service Contract Act of 1965, as amended, and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

THIS STATEMENT IS FOR INFORMATION ONLY: IT IS NOT A WAGE DETERMINATION

Employee Class Monetary Wage-Fringe Benefits

Marine Mechanic \$16.24

Mechanic Helper \$13.98 Laborer \$11.62

(End of clause)

52.232-25 PROMPT PAYMENT (OCT 2003)

Notwithstanding any other payment clause in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer (EFT). Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see paragraph (a)(4) of this clause concerning payments due on Saturdays, Sundays, and legal holidays.)

- (a) Invoice payments--(1) Due date. (i) Except as indicated in paragraphs (a)(2) and (c) of this clause, the due date for making invoice payments by the designated payment office is the later of the following two events:
- (A) The 30th day after the designated billing office receives a proper invoice from the Contractor (except as provided in paragraph (a)(1)(ii) of this clause).
- (B) The 30th day after Government acceptance of supplies delivered or services performed. For a final invoice, when the payment amount is subject to contract settlement actions, acceptance is deemed to occur on the effective date of the contract settlement.
- (ii) If the designated billing office fails to annotate the invoice with the actual date of receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the Contractor's invoice, provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.
- (2) Certain food products and other payments. (i) Due dates on Contractor invoices for meat, meat food products, or fish; perishable agricultural commodities; and dairy products, edible fats or oils, and food products prepared from edible fats or oils are--
- (A) For meat or meat food products, as defined in section 2(a)(3) of the Packers and Stockyard Act of 1921 (7 U.S.C. 182(3)), and as further defined in Pub. L. 98-181, including any edible fresh or frozen poultry meat, any perishable poultry meat food product, fresh eggs, and any perishable egg product, as close as possible to, but not later than, the 7th day after product delivery.
- (B) For fresh or frozen fish, as defined in section 204(3) of the Fish and Seafood Promotion Act of 1986 (16 U.S.C. 4003(3)), as close as possible to, but not later than, the 7th day after product delivery.
- C) For perishable agricultural commodities, as defined in section 1(4) of the Perishable Agricultural Commodities Act of 1930 (7 U.S.C. 499a(4)), as close as possible to, but not later than, the 10th day after product delivery, unless another date is specified in the contract.
- (D) For dairy products, as defined in section 111(e) of the Dairy Production Stabilization Act of 1983 (7 U.S.C. 4502(e)), edible fats or oils, and food products prepared from edible fats or oils, as close as possible to, but not later than, the 10th day after the date on which a proper invoice has been received. Liquid milk, cheese, certain processed cheese products, butter, yogurt, ice cream, mayonnaise, salad dressings, and other similar products, fall within this classification. Nothing in the Act limits this classification to refrigerated products. When questions arise regarding the proper classification of a specific product, prevailing industry practices will be followed in specifying a contract payment due date. The burden of proof that a classification of a specific product is, in fact, prevailing industry practice is upon the Contractor making the representation.
- (ii) If the contract does not require submission of an invoice for payment (e.g., periodic lease payments), the due date will be as specified in the contract.
- (3) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(3)(i) through (a)(3)(x) of this clause. If the invoice does not comply with these requirements, the designated billing office will return it within 7 days after receipt (3 days for meat, meat food products, or fish; 5 days for perishable agricultural commodities, dairy products, edible fats or oils, and food products prepared from edible fats or oils), with the reasons why it is not a proper invoice. The Government will take into account untimely notification when computing any interest penalty owed the Contractor.
- (i) Name and address of the Contractor.

- (ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of the mailing or transmission.)
- (iii) Contract number or other authorization for supplies delivered or services performed (including order number and contract line item number).
- (iv) Description, quantity, unit of measure, unit price, and extended price of supplies delivered or services performed.
- (v) Shipping and payment terms (e.g., shipment number and date of shipment, discount for prompt payment terms). Bill of lading number and weight of shipment will be shown for shipments on Government bills of lading.
- (vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).
- (vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.
- (viii) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.
- (ix) Electronic funds transfer (EFT) banking information.
- (A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.
- (B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (e.g., 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.
- (C) EFT banking information is not required if the Government waived the requirement to pay by EFT.
- (x) Any other information or documentation required by the contract (e.g., evidence of shipment).
- (4) Interest penalty. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(4)(i) through (a)(4)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.
- (i) The designated billing office received a proper invoice.
- (ii) The Government processed a receiving report or other Government documentation authorizing payment, and there was no disagreement over quantity, quality, or Contractor compliance with any contract term or condition.
- (iii) In the case of a final invoice for any balance of funds due the Contractor for supplies delivered or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

- (5) Computing penalty amount. The Government will compute the interest penalty in accordance with the Office of Management and Budget prompt payment regulations at 5 CFR part 1315.
- (i) For the sole purpose of computing an interest penalty that might be due the Contractor, Government acceptance is deemed to occur constructively on the 7th day (unless otherwise specified in this contract) after the Contractor delivers the supplies or performs the services in accordance with the terms and conditions of the contract, unless there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. If actual acceptance occurs within the constructive acceptance period, the Government will base the determination of an interest penalty on the actual date of acceptance. The constructive acceptance requirement does not, however, compel Government officials to accept supplies or services, perform contract administration functions, or make payment prior to fulfilling their responsibilities.
- (ii) The prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.
- (6) Discounts for prompt payment. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with the prompt payment regulations at 5 CFR part 1315.
- (7) Additional interest penalty. (i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315 in addition to the interest penalty amount only if--
- (A) The Government owes an interest penalty of \$1 or more;
- (B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and
- (C) The Contractor makes a written demand to the designated payment office for additional penalty payment, in accordance with paragraph (a)(7)(ii) of this clause, postmarked not later than 40 days after the invoice amount is paid.
- (ii)(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall--
- (1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;
- (2) Attach a copy of the invoice on which the unpaid late payment interest is due; and
- (3) State that payment of the principal has been received, including the date of receipt.
- (B) If there is no postmark or the postmark is illegible--
- (1) The designated payment office that receives the demand will annotate it with the date of receipt, provided the demand is received on or before the 40th day after payment was made; or

- (2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand, provided such date is no later than the 40th day after payment was made.
- (iii) The additional penalty does not apply to payments regulated by other Government regulations (e.g., payments under utility contracts subject to tariffs and regulation).
- (b) Contract financing payment. If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.
- (c) Fast payment procedure due dates. If this contract contains the clause at 52.213-1, Fast Payment Procedure, payments will be made within 15 days after the date of receipt of the invoice.
- (d) Overpayments. If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall immediately notify the Contracting Officer and request instructions for disposition of the overpayment.

(End of clause)

52.243-1 CHANGES--FIXED-PRICE (AUG 1987) - ALTERNATE II (APR 1984)

- (a) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:
- (1) Description of services to be performed.
- (2) Time of performance (i.e., hours of the day, days of the week, etc.).
- (3) Place of performance of the services.
- (4) Drawings, designs, or specifications when the supplies to be furnished are to be specially manufactured for the Government, in accordance with the drawings, designs, or specifications.
- (b) If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, the Contracting Officer shall make an equitable adjustment in the contract price, the delivery schedule, or both, and shall modify the contract.
- (c) The Contractor must assert its right to an adjustment under this clause within 30 days from the date of receipt of the written order. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract.
- (d) If the Contractor's proposal includes the cost of property made obsolete or excess by the change, the Contracting Officer shall have the right to prescribe the manner of the disposition of the property.
- (e) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

(End of clause)

52.249-4 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (SERVICES) (SHORT FORM) (APR 1984)

The Contracting Officer, by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the Government shall be liable only for payment under the payment provisions of this contract for services rendered before the effective date of termination.

(End of clause)

52.249-8 DEFAULT (FIXED-PRICE SUPPLY AND SERVICE) (APR 1984)

- (a)(1) The Government may, subject to paragraphs (c) and (d) of this clause, by written notice of default to the Contractor, terminate this contract in whole or in part if the Contractor fails to--
- (i) Deliver the supplies or to perform the services within the time specified in this contract or any extension;
- (ii) Make progress, so as to endanger performance of this contract (but see subparagraph (a)(2) of this clause); or
- (iii) Perform any of the other provisions of this contract (but see subparagraph (a)(2) below).
- (2) The Government's right to terminate this contract under subdivisions (a)(1)(ii) and (1)(iii) of this clause, may be exercised if the Contractor does not cure such failure within 10 days (or more if authorized in writing by the Contracting Officer) after receipt of the notice from the Contracting Officer specifying the failure.
- (b) If the Government terminates this contract in whole or in part, it may acquire, under the terms and in the manner the Contracting Officer considers appropriate, supplies or services similar to those terminated, and the Contractor will be liable to the Government for any excess costs for those supplies or services. However, the Contractor shall continue the work not terminated.
- (c) Except for defaults of subcontractors at any tier, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance the failure to perform must be beyond the control and without the fault or negligence of the Contractor.
- (d) If the failure to perform is caused by the default of a subcontractor at any tier, and if the cause of the default is beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be liable for any excess costs for failure to perform, unless the subcontracted supplies or services were obtainable from other sources in sufficient time for the Contractor to meet the required delivery schedule.
- (e) If this contract is terminated for default, the Government may require the Contractor to transfer title and deliver to the Government, as directed by the Contracting Officer, any (1) completed supplies, and (2) partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights (collectively referred to as "manufacturing materials" in this clause) that the Contractor has specifically produced or acquired for the terminated portion of this contract. Upon direction of the Contracting Officer, the Contractor shall also protect and preserve property in its possession in which the Government has an interest.
- (f) The Government shall pay contract price for completed supplies delivered and accepted. The Contractor and Contracting Officer shall agree on the amount of payment for manufacturing materials delivered and accepted and for the protection and preservation of the property. Failure to agree will be a dispute under the Disputes clause.

The Government may withhold from these amounts any sum the Contracting Officer determines to be necessary to protect the Government against loss because of outstanding liens or claims of former lien holders.

- (g) If, after termination, it is determined that the Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Government.
- (h) The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

http://www.arnet.gov/far

http://farsite.hill.af.mil

http://www.acq.osd.mil/dpap/dfars/index.htm

www.deskbook.osd.mil

http://akss.dau.mil/jsp/default.jsp

http://www.hq.usace.army.mil/cepr/asp/library/efar.asp

(End of clause)

252.204-7004 REQUIRED CENTRAL CONTRACTOR REGISTRATION ALTERNATE A (NOV 2003)

(a) Definitions. As used in this clause--

"Central Contractor Registration (CCR) database" means the primary Government repository for contractor information required for the conduct of business with the Government.

"Commercial and Government Entity (CAGE) code" means--

- (1) A code assigned by the Defense Logistics Information Service (DLIS) to identify a commercial or Government entity; or
- (2) A code assigned by a member of the North Atlantic Treaty Organization that DLIS records and maintains in the CAGE master file. This type of code is known as an "NCAGE code."

"Data Universal Numbering System (DUNS) number" means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

"Data Universal Numbering System +4 (DUNS+4) number" means the DUNS number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional CCR

records for identifying alternative Electronic Funds Transfer (EFT) accounts (see Subpart 32.11 of the Federal Acquisition Regulation) for the same parent concern.

- "Registered in the CCR database" means that--
- (1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR database;
- (2) The Contractor's CAGE code is in the CCR database; and
- (3) The Government has validated all mandatory data fields and has marked the records "Active."
- (b)(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation.
- (2) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS +4" followed by the DUNS or DUNS +4 number that identifies the offeror's name and address exactly as stated in the offer. The DUNS number will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.
- (c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.
- (1) An offeror may obtain a DUNS number--
- (i) If located within the United States, by calling Dun and Bradstreet at 1-866-705-5711 or via the Internet at http://www.dnb.com; or
- (ii) If located outside the United States, by contacting the local Dun and Bradstreet office.
- (2) The offeror should be prepared to provide the following information:
- (i) Company legal business.
- (ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.
- (iii) Company Physical Street Address, City, State, and Zip Code.
- (iv) Company Mailing Address, City, State and Zip Code (if separate from physical).
- (v) Company Telephone Number.
- (vi) Date the company was started.
- (vii) Number of employees at your location.
- (viii) Chief executive officer/key manager.
- (ix) Line of business (industry).
- (x) Company Headquarters name and address (reporting relationship within your entity).

- (d) If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror.
- (e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation.
- (f) The Contractor is responsible for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.
- (g)(1)(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in Subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to (A) change the name in the CCR database; (B) comply with the requirements of Subpart 42.12 of the FAR; and (C) agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.
- (ii) If the Contractor fails to comply with the requirements of paragraph (g)(1)(i) of this clause, or fails to perform the agreement at paragraph (g)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.
- (2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see FAR Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.
- (h) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the internet at http://www.ccr.gov or by calling 1-888-227-2423, or 269-961-5757.

(End of clause)

Section J - List of Documents, Exhibits and Other Attachments

WAGE DETERMINATION

94-2259 MA, SOUTHEASTERN

WAGE DETERMINATION NO: 94-2259 REV (18) AREA: MA, SOUTHEASTERN

HEALTH AND WELFARE LEVEL - INSURANCE ONLY **OTHER WELFARE LEVEL WD:94-2260

REGISTER OF WAGE DETERMINATIONS UNDER U.S. DEPARTMENT OF LABOR

THE SERVICE CONTRACT ACT | EMPLOYMENT STANDARDS ADMINISTRATION

By direction of the Secretary of Labor WAGE AND HOUR DIVISION

WASHINGTON D.C. 20210

| Wage Determination No.: 1994-2259

William W.Gross Division of Revision No.: 18

Director Wage Determinations Date Of Revision: 06/23/2004

This wage determination applies to the following counties in MASSACHUSETTS:

BARNSTABLE, BRISTOL, DUKES, NANTUCKET, NORFOLK, and PLYMOUTH Excluding the cities and towns listed below:

BRISTOL County: Attleboro City, Mansfield, North Attleborough Town, Norton Town,

Raynham, Reheoboth Town, and Seekonk.

NORFOLK County: Quincy City, Bellingham Town, Braintree Town, Brookline Town, Canton

Town, Cohasset Town, Dedham Town, Dover Town, Foxborough Town, Franklin Town,

Holbrook Town, Medfield Town, Medway Town, Millis Town, Milton Town, Needham Town,

Norfolk Town, Norwood Town, Randolph Town, Sharon Town, Stoughton Town, Walpole

Town, Wellesley Town, Westwood Town, Weymouth Town, and Wrentham Town.

PLYMOUTH County: Carver, Duxbury Town, Hanover Town, Hanson Town, Hingham Town, Hull

Town, Kingston Town, Lakeville, Marshfield Town, Middleborough, Norwell Town,

Pembroke Town, Plymouth, Plympton, Rockland Town, and Scituate Town.

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Fringe Benefits Required Follow the Occupational Listing

OCCUPATION CODE - TITLE MINIMUM WAGE RATE

01000 - Administrative Support and Clerical Occupations

01011 - Accounting Clerk I 11.54 01012 - Accounting Clerk II 13.60 01013 - Accounting Clerk III 14.71 01014 - Accounting Clerk IV 15.43

01030 - Court Reporter	17.31	
01050 - Dispatcher, Motor Vehicle	15.39	
01060 - Document Preparation Clerk	13.30	
01070 - Messenger (Courier)	10.12	
01090 - Duplicating Machine Operator	13.30	
01110 - Film/Tape Librarian	14.08	
01115 - General Clerk I	11.00	
01116 - General Clerk II	12.62	
01117 - General Clerk III	13.63	
01118 - General Clerk IV	15.25	
01120 - Housing Referral Assistant	18.00	
01131 - Key Entry Operator I	12.83	
01132 - Key Entry Operator II	14.44	
01191 - Order Clerk I	11.54	
01192 - Order Clerk II	13.60	
01261 - Personnel Assistant (Employment) I	13.09	
01262 - Personnel Assistant (Employment) II	15.23	
01263 - Personnel Assistant (Employment) III	17.31	
01264 - Personnel Assistant (Employment) IV	18.11	
01270 - Production Control Clerk	18.11	
01290 - Rental Clerk	15.23	
01300 - Scheduler, Maintenance	15.23	
01311 - Secretary I	15.23	
01312 - Secretary II	17.23	
01313 - Secretary III	18.11	
01314 - Secretary IV	21.94	
01315 - Secretary V	23.37	
01320 - Service Order Dispatcher		14.93
01341 - Stenographer I	13.60	
01342 - Stenographer II	15.23	
01400 - Supply Technician	21.94	
01420 - Survey Worker (Interviewer)		13.60
01460 - Switchboard Operator-Receptionist	12.16	
01510 - Test Examiner	17.23	
01520 - Test Proctor	17.23	
01531 - Travel Clerk I	11.70	

01532 - Travel Clerk II	12.54	
01533 - Travel Clerk III	13.34	
01611 - Word Processor I	12.72	
01612 - Word Processor II	14.28	
01613 - Word Processor III	15.95	
03000 - Automatic Data Processing Occupations		
03010 - Computer Data Librarian		13.72
03041 - Computer Operator I	14.53	
03042 - Computer Operator II	16.26	
03043 - Computer Operator III	18.11	
03044 - Computer Operator IV	21.67	
03045 - Computer Operator V	24.00	
03071 - Computer Programmer I (1)		18.14
03072 - Computer Programmer II (1)		24.95
03073 - Computer Programmer III (1)		27.62
03074 - Computer Programmer IV (1)		27.62
03101 - Computer Systems Analyst I (1)		27.62
03102 - Computer Systems Analyst II (1)		27.62
03103 - Computer Systems Analyst III (1)		27.62
03160 - Peripheral Equipment Operator	14.53	
05000 - Automotive Service Occupations		
05005 - Automotive Body Repairer, Fiberglass	18.90	
05010 - Automotive Glass Installer	17.71	
05040 - Automotive Worker	16.03	
05070 - Electrician, Automotive	16.81	
		14.54
05100 - Mobile Equipment Servicer		
05100 - Mobile Equipment Servicer 05130 - Motor Equipment Metal Mechanic	17.53	
	17.53 16.03	
05130 - Motor Equipment Metal Mechanic		17.55
05130 - Motor Equipment Metal Mechanic 05160 - Motor Equipment Metal Worker		17.55
05130 - Motor Equipment Metal Mechanic 05160 - Motor Equipment Metal Worker 05190 - Motor Vehicle Mechanic	16.03	17.55
05130 - Motor Equipment Metal Mechanic 05160 - Motor Equipment Metal Worker 05190 - Motor Vehicle Mechanic 05220 - Motor Vehicle Mechanic Helper	16.03 13.75	17.55
 05130 - Motor Equipment Metal Mechanic 05160 - Motor Equipment Metal Worker 05190 - Motor Vehicle Mechanic 05220 - Motor Vehicle Mechanic Helper 05250 - Motor Vehicle Upholstery Worker 	16.03 13.75 15.27	17.55
 05130 - Motor Equipment Metal Mechanic 05160 - Motor Equipment Metal Worker 05190 - Motor Vehicle Mechanic 05220 - Motor Vehicle Mechanic Helper 05250 - Motor Vehicle Upholstery Worker 05280 - Motor Vehicle Wrecker 	16.03 13.75 15.27 16.03	17.55
 05130 - Motor Equipment Metal Mechanic 05160 - Motor Equipment Metal Worker 05190 - Motor Vehicle Mechanic 05220 - Motor Vehicle Mechanic Helper 05250 - Motor Vehicle Upholstery Worker 05280 - Motor Vehicle Wrecker 05310 - Painter, Automotive 	16.03 13.75 15.27 16.03 16.81	17.55

07000 - Food Preparation and Service Occupations	
(not set) - Food Service Worker	10.63
07010 - Baker	12.73
07041 - Cook I	12.14
07042 - Cook II	13.39
07070 - Dishwasher	8.82
07130 - Meat Cutter	16.19
07250 - Waiter/Waitress	10.49
09000 - Furniture Maintenance and Repair Occupations	
09010 - Electrostatic Spray Painter	16.14
09040 - Furniture Handler	11.59
09070 - Furniture Refinisher	16.14
09100 - Furniture Refinisher Helper	13.19
09110 - Furniture Repairer, Minor	14.66
09130 - Upholsterer	16.14
11030 - General Services and Support Occupations	
11030 - Cleaner, Vehicles	10.47
11060 - Elevator Operator	10.14
11090 - Gardener	15.23
11121 - House Keeping Aid I	9.71
11122 - House Keeping Aid II	10.14
11150 - Janitor	12.27
11210 - Laborer, Grounds Maintenance	13.26
11240 - Maid or Houseman	9.71
11270 - Pest Controller	15.50
11300 - Refuse Collector	12.27
11330 - Tractor Operator	14.15
11360 - Window Cleaner	13.26
12000 - Health Occupations	
12020 - Dental Assistant	15.89
12040 - Emergency Medical Technician (EMT)/Paramedic/A	mbulance Driver 15.25
12071 - Licensed Practical Nurse I	13.82
12072 - Licensed Practical Nurse II	15.51
12073 - Licensed Practical Nurse III	17.35
12100 - Medical Assistant	14.10
12130 - Medical Laboratory Technician	14.10

12160 - Medical Record Clerk	14.10	
12190 - Medical Record Technician		15.49
12221 - Nursing Assistant I	8.84	
12222 - Nursing Assistant II	9.94	
12223 - Nursing Assistant III	10.86	
12224 - Nursing Assistant IV	12.18	
12250 - Pharmacy Technician	13.90	
12280 - Phlebotomist	12.82	
12311 - Registered Nurse I	21.51	
12312 - Registered Nurse II	26.30	
12313 - Registered Nurse II, Specialist		26.30
12314 - Registered Nurse III	31.81	
12315 - Registered Nurse III, Anesthetist		31.81
12316 - Registered Nurse IV	38.14	
13000 - Information and Arts Occupations		
13002 - Audiovisual Librarian	20.66	
13011 - Exhibits Specialist I	17.72	
13012 - Exhibits Specialist II	21.95	
13013 - Exhibits Specialist III	25.42	
13041 - Illustrator I	18.85	
13042 - Illustrator II	23.58	
13043 - Illustrator III	24.85	
13047 - Librarian	27.29	
13050 - Library Technician	14.11	
13071 - Photographer I	14.36	
13072 - Photographer II	16.04	
13073 - Photographer III	19.88	
13074 - Photographer IV	21.15	
13075 - Photographer V	25.59	
15000 - Laundry, Dry Cleaning, Pressing and Related O	ccupations	
15010 - Assembler	8.80	
15030 - Counter Attendant	8.80	
15040 - Dry Cleaner	11.69	
15070 - Finisher, Flatwork, Machine		8.80
15090 - Presser, Hand	8.80	
15100 - Presser, Machine, Drycleaning	8.80	

15130 - Presser, Machine, Shirts		8.80
15160 - Presser, Machine, Wearing Apparel, Laundry	8.80	
15190 - Sewing Machine Operator		12.40
15220 - Tailor		12.95
15250 - Washer, Machine	9.78	
19000 - Machine Tool Operation and Repair Occupations		
19010 - Machine-Tool Operator (Toolroom)		19.74
19040 - Tool and Die Maker	20.09	
21000 - Material Handling and Packing Occupations		
21010 - Fuel Distribution System Operator	16.16	
21020 - Material Coordinator	16.60	
21030 - Material Expediter	16.60	
21040 - Material Handling Laborer	12.29	
21050 - Order Filler	11.79	
21071 - Forklift Operator	14.57	
21080 - Production Line Worker (Food Processing)		14.57
21100 - Shipping/Receiving Clerk	14.95	
21130 - Shipping Packer	14.95	
21140 - Store Worker I	10.39	
21150 - Stock Clerk (Shelf Stocker; Store Worker II)	14.05	
21210 - Tools and Parts Attendant		14.07
21400 - Warehouse Specialist	14.07	
23000 - Mechanics and Maintenance and Repair Occupatio	ns	
23010 - Aircraft Mechanic	21.68	
23040 - Aircraft Mechanic Helper	16.52	
23050 - Aircraft Quality Control Inspector		22.60
23060 - Aircraft Servicer	18.88	
23070 - Aircraft Worker	19.82	
23100 - Appliance Mechanic	20.97	
23120 - Bicycle Repairer	13.49	
23125 - Cable Splicer	24.83	
23130 - Carpenter, Maintenance		22.58
23140 - Carpet Layer	19.70	
23160 - Electrician, Maintenance	24.84	
23181 - Electronics Technician, Maintenance I		20.32
23182 - Electronics Technician, Maintenance II		21.32

23183 - Electronics Technician, Maintenance III	22.89
23260 - Fabric Worker	17.74
23290 - Fire Alarm System Mechanic	22.09
23310 - Fire Extinguisher Repairer	18.59
23340 - Fuel Distribution System Mechanic	21.43
23370 - General Maintenance Worker	19.00
23400 - Heating, Refrigeration and Air Conditioning Me	echanic 21.66
23430 - Heavy Equipment Mechanic	21.75
23440 - Heavy Equipment Operator	23.62
23460 - Instrument Mechanic	22.80
23470 - Laborer	12.55
23500 - Locksmith	19.53
23530 - Machinery Maintenance Mechanic	21.76
23550 - Machinist, Maintenance	22.80
23580 - Maintenance Trades Helper	15.96
23640 - Millwright	23.19
23700 - Office Appliance Repairer	21.64
23740 - Painter, Aircraft	20.80
23760 - Painter, Maintenance	20.39
23790 - Pipefitter, Maintenance	24.44
23800 - Plumber, Maintenance	21.83
23820 - Pneudraulic Systems Mechanic	22.41
23850 - Rigger	22.41
23870 - Scale Mechanic	20.49
23890 - Sheet-Metal Worker, Maintenance	24.84
23910 - Small Engine Mechanic	18.63
23930 - Telecommunication Mechanic I	24.84
23931 - Telecommunication Mechanic II	25.77
23950 - Telephone Lineman	24.84
23960 - Welder, Combination, Maintenance	20.37
23965 - Well Driller	20.37
23970 - Woodcraft Worker	20.37
23980 - Woodworker	16.90
24000 - Personal Needs Occupations	
24570 - Child Care Attendant	11.76
24580 - Child Care Center Clerk	14.68

24600 - Chore Aid	9.82	
24630 - Homemaker	9.02 17.57	
25000 - Plant and System Operation Occupations	17.57	
25010 - Boiler Tender	21.43	
25040 - Sewage Plant Operator	21.43	19.13
·	21.43	17.13
25070 - Stationary Engineer	21.43	16.59
25190 - Ventilation Equipment Tender 25210 - Water Treatment Plant Operator	19.13	
·	19.13	
27000 - Protective Service Occupations	22 54	
(not set) - Police Officer	22.54	
27004 - Alarm Monitor	14.78	
27006 - Corrections Officer	21.11	
27010 - Court Security Officer	21.11	
27040 - Detention Officer	21.11	
27070 - Firefighter	20.98	
27101 - Guard I	10.99	
27102 - Guard II	12.33	
28000 - Stevedoring/Longshoremen Occupations		
28010 - Blocker and Bracer	18.40	
28020 - Hatch Tender	16.73	
28030 - Line Handler	16.73	
28040 - Stevedore I	15.94	
28050 - Stevedore II	17.55	
29000 - Technical Occupations		
21150 - Graphic Artist	26.54	
29010 - Air Traffic Control Specialist, Center (2)		32.17
29011 - Air Traffic Control Specialist, Station (2)		22.19
29012 - Air Traffic Control Specialist, Terminal (2)	24.43	
29023 - Archeological Technician I	15.96	
29024 - Archeological Technician II	18.40	
29025 - Archeological Technician III	22.79	
29030 - Cartographic Technician	22.79	
29035 - Computer Based Training (CBT) Specialist/ Instru	ıctor	30.10
29040 - Civil Engineering Technician	20.71	
29061 - Drafter I	14.65	
29062 - Drafter II	16.44	

29063 - Drafter III	18.40	
29064 - Drafter IV	22.79	
29081 - Engineering Technician I	14.85	
29082 - Engineering Technician II	17.18	
29083 - Engineering Technician III	19.57	
29084 - Engineering Technician IV	23.09	
29085 - Engineering Technician V	23.07	27.50
29086 - Engineering Technician VI	32.29	27.50
29090 - Environmental Technician	32.29	20.09
	30.31	20.09
29100 - Flight Simulator/Instructor (Pilot) 29160 - Instructor		
	26.14	
29210 - Laboratory Technician	19.23	20.42
29240 - Mathematical Technician	10.75	20.63
29361 - Paralegal/Legal Assistant I	13.75	
29362 - Paralegal/Legal Assistant II	19.02	
29363 - Paralegal/Legal Assistant III	23.26	20.24
29364 - Paralegal/Legal Assistant IV	04.00	28.24
29390 - Photooptics Technician	21.82	
29480 - Technical Writer	30.63	
29491 - Unexploded Ordnance (UXO) Technician I	20.45	
29492 - Unexploded Ordnance (UXO) Technician II	24.74	
29493 - Unexploded Ordnance (UXO) Technician III	29.65	
29494 - Unexploded (UXO) Safety Escort	20.45	
29495 - Unexploded (UXO) Sweep Personnel	20.45	
29620 - Weather Observer, Senior (3)		18.48
29621 - Weather Observer, Combined Upper Air and Su	urface Prograr	
29622 - Weather Observer, Upper Air (3)		17.51
31000 - Transportation/ Mobile Equipment Operation Occ	•	
31030 - Bus Driver	15.55	
31260 - Parking and Lot Attendant		9.56
31290 - Shuttle Bus Driver	14.55	
31300 - Taxi Driver	11.15	
31361 - Truckdriver, Light Truck	14.63	
31362 - Truckdriver, Medium Truck		15.55
31363 - Truckdriver, Heavy Truck		19.16
31364 - Truckdriver, Tractor-Trailer	19.16	

99000 - Miscellaneous Occupations		
99020 - Animal Caretaker	10.70	
99030 - Cashier	8.93	
99041 - Carnival Equipment Operator	11.50	
99042 - Carnival Equipment Repairer	12.39	
99043 - Carnival Worker	9.53	
99050 - Desk Clerk	11.10	
99095 - Embalmer	17.18	
99300 - Lifeguard	9.10	
99310 - Mortician	26.30	
99350 - Park Attendant (Aide)	13.50	
99400 - Photofinishing Worker (Photo Lab Tech., Darkroom	Tech)	11.48
99500 - Recreation Specialist	17.60	
99510 - Recycling Worker	15.07	
99610 - Sales Clerk	11.76	
99620 - School Crossing Guard (Crosswalk Attendant)		9.79
99630 - Sport Official	10.75	
99658 - Survey Party Chief (Chief of Party)		21.96
99659 - Surveying Technician (Instr. Person/Surveyor Asst	./Instr.)	19.99
99660 - Surveying Aide	16.51	
99690 - Swimming Pool Operator		15.92
99720 - Vending Machine Attendant		11.90
99730 - Vending Machine Repairer		15.92
99740 - Vending Machine Repairer Helper	12.91	

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$2.59 an hour or \$103.60 a week or \$448.93 a month VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173) HOLIDAYS: A minimum of eleven paid holidays per year: New Year's Day, Martin Luther King Jr's Birthday, Washington's Birthday, Good Friday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. A contractor may substitute for any of the named holidays another

day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE PARENTHESES AFTER THEM RECEIVE THE FOLLOWING BENEFITS (as numbered):

- 1) Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See CFR 4.156)
- 2) APPLICABLE TO AIR TRAFFIC CONTROLLERS ONLY NIGHT DIFFERENTIAL: An employee is entitled to pay for all work performed between the hours of 6:00 P.M. and 6:00 A.M. at the rate of basic pay plus a night pay differential amounting to 10 percent of the rate of basic pay.
- 3) WEATHER OBSERVERS NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordinance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract

(either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

** NOTES APPLYING TO THIS WAGE DETERMINATION **

Source of Occupational Title and Descriptions:

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations," Fourth Edition, January 1993, as amended by the Third Supplement, dated March 1997, unless otherwise indicated. This publication may be obtained from the Superintendent of Documents, at 202-783-3238, or by writing to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Copies of specific job descriptions may also be obtained from the appropriate contracting officer.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE {Standard Form 1444 (SF 1444)}

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable

relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. {See Section 4.6 (C)(vi)} When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the need for a conformed occupation) and computes a proposed rate).
- 2) After contract award, the contractor prepares a written report listing in order proposed classification title), a Federal grade equivalency (FGE) for each proposed classification), job description), and rationale for proposed wage rate), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).
- 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
- 5) The contracting officer transmits the Wage and Hour decision to the contractor.
- 6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the

wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

Section K - Representations, Certifications and Other Statements of Offerors

CLAUSES INCORPORATED BY FULL TEXT

52.203-2 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (APR 1985)

- (a) The offeror certifies that --
- (1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to –
- (i) Those prices,
- (ii) The intention to submit an offer, or
- (iii) The methods of factors used to calculate the prices offered:
- (2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and
- (3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.
- (b) Each signature on the offer is considered to be a certification by the signatory that the signatory --
- (1) Is the person in the offeror's organization responsible for determining the prices offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision; or
- (2) (i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provison ______ (insert full name of person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror's organization);
- (ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and
- (iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision.
- (c) If the offeror deletes or modifies subparagraph (a)(2) of this provision, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

(End of clause)

52.203-11 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (APR 1991)

- (a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this Certification.
- (b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989,--
- (1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;
- (2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and
- (3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.
- (1) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

(End of provision)

52.204-3 TAXPAYER IDENTIFICATION (OCT 1998)

(a) Definitions.

"Common parent," as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

"Taxpayer Identification Number (TIN)," as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

- (b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.
- (c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the

payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(d) Taxpayer Identification Number (TIN).
TIN:
TIN has been applied for.
TIN is not required because:
Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;
Offeror is an agency or instrumentality of a foreign government;
Offeror is an agency or instrumentality of the Federal Government.
(e) Type of organization.
Sole proprietorship;
Partnership;
Corporate entity (not tax-exempt);
Corporate entity (tax-exempt);
Government entity (Federal, State, or local);
Foreign government;
International organization per 26 CFR 1.6049-4;
Other
(f) Common parent.
Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.
Name and TIN of common parent:
Name
TIN
(End of provision)

52.204-5 WOMEN-OWNED BUSINESS (OTHER THAN SMALL BUSINESS) (MAY 1999)

- (a) Definition. Women-owned business concern, as used in this provision, means a concern that is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.
- (b) Representation. [Complete only if the offeror is a women-owned business concern and has not represented itself as a small business concern in paragraph (b)(1) of FAR 52.219-1, Small Business Program Representations, of this solicitation.] The offeror represents that it () is a women-owned business concern.

(End of provision)

- 52.209-5 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (DEC 2001)
- (a)(1) The Offeror certifies, to the best of its knowledge and belief, that-
- (i) The Offeror and/or any of its Principals-
- (A) Are () are not () presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;
- (B) Have () have not (), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and
- (C) Are () are not () presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision.
- (ii) The Offeror has () has not (), within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.
- (2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

- (b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a

determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

- (d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (MAY 2004)

- (a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 336611.
- (2) The small business size standard is 1000 employees (insert size standard).
- (3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.
- (b) Representations. (1) The offeror represents as part of its offer that it () is, () is not a small business concern.
- (2) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, for general statistical purposes, that it () is, () is not a small disadvantaged business concern as defined in 13 CFR 124.1002.
- (3) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it () is, () is not a women-owned small business concern.
- (4) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it () is, () is not a veteran-owned small business concern.
- (5) (Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (b)(4) of this provision.) The offeror represents as part of its offer that it () is, () is not a service-disabled veteran-owned small business concern.
- (6) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, as part of its offer, that--
- (i) It () is, () is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR part 126; and

- (ii) It () is, () is not a joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (b)(6)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. (The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture:_______.) Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.
- (c) Definitions. As used in this provision--

Service-disabled veteran-owned small business concern--

- (1) Means a small business concern--
- (i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and
- (ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.
- (2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).
- "Small business concern," means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in paragraph (a) of this provision.

Veteran-owned small business concern means a small business concern-

- (1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and
- (2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern," means a small business concern --

- (1) That is at least 51 percent owned by one or more women; in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and
- (2) Whose management and daily business operations are controlled by one or more women.
- (d) Notice.
- (1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.
- (2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small, HUBZone small, small disadvantaged, or women-owned small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall--

- (i) Be punished by imposition of fine, imprisonment, or both;
- (ii) Be subject to administrative remedies, including suspension and debarment; and
- (iii) Be ineligible for participation in programs conducted under the authority of the Act.

(End of provision)

52.219-19 SMALL BUSINESS CONCERN REPRESENTATION FOR THE SMALL BUSINESS COMPETITIVENESS DEMONSTRATION PROGRAM (OCT 2000)

(a) Definition.

"Emerging small business" as used in this solicitation, means a small business concern whose size is no greater than 50 percent of the numerical size standard applicable to the North American Industry Classification System (NAICS) code assigned to a contracting opportunity.

- (b) [Complete only if the Offeror has represented itself under the provision at 52.219-1 as a small business concern under the size standards of this solicitation.] The Offeror [] is, [] is not an emerging small business.
- (c) (Complete only if the Offeror is a small business or an emerging small business, indicating its size range.)

Offeror's number of employees for the past 12 months (check this column if size standard stated in solicitation is expressed in terms of number of employees) or Offeror's average annual gross revenue for the last 3 fiscal years (check this column if size standard stated in solicitation is expressed in terms of annual receipts). (Check one of the following.)

No. of Employees Avg. Annual Gross Revenues

____ 50 or fewer ____ \$1 million or less

____ 51 - 100 ____ \$1,000,001 - \$2 million

___ 101 - 250 ____ \$2,000,001 - \$3.5 million

___ 251 - 500 ____ \$3,500,001 - \$5 million

___ 501 - 750 ____ \$5,000,001 - \$10 million

___ 751 - 1,000 ____ \$10,000,001 - \$17 million

___ Over 1,000 ____ Over \$17 million

(End of provision)

52.219-21 SMALL BUSINESS SIZE REPRESENTATION FOR TARGETED INDUSTRY CATEGORIES UNDER THE SMALL BUSINESS COMPETITIVENESS DEMONSTRATION PROGRAM (MAY 1999)

(Complete only if the Offeror has represented itself under the provision at 52.219-1 as a small business concern

under the size standards of this solicitation.)

Offeror's number of employees for the past 12 months (check this column if size standard stated in solicitation is expressed in terms of number of employees) or Offeror's average annual gross revenue for the last 3 fiscal years (check this column if size standard stated in solicitation is expressed in terms of annual receipts). (Check one of the following.)

No. of Employees	Avg. Annual Gross Revenues
50 or fewer	\$1 million or less
51 - 100	\$1,000,001 - \$2 million
101 - 250	\$2,000,001 - \$3.5 million
251 - 500	\$3,500,001 - \$5 million
501 - 750	\$5,000,001 - \$10 million
751 - 1,000	\$10,000,001 - \$17 million
Over 1,000	Over \$17 million
(End of provision)	

52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)

- (a) Segregated facilities, as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.
- (b) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.
- (c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

(End of clause)

52.222-22 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FEB 1999)

The offeror represents that --

(a) () It has, () has not participated in a previous contract or subcontract subject to the Equal Opportunity clause

of this solicitation;

- (b) () It has, () has not, filed all required compliance reports; and
- (c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

(End of provision)

52.222-25 AFFIRMATIVE ACTION COMPLIANCE (APR 1984)

The offeror represents that

- (a) [] it has developed and has on file, [] has not developed and does not have on file, at each establishment, affirmative action programs required by the rules and regulations of the Secretary of Labor (41 CFR 60-1 and 60-2), or
- (b) [] has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(End of provision)

52.223-4 RECOVERED MATERIAL CERTIFICATION (OCT 1997)

As required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6962(c)(3)(A)(i)), the offeror certifies, by signing this offer, that the percentage of recovered materials to be used in the performance of the contract will be at least the amount required by the applicable contract specifications.

(End of provision)

52.223-13 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (AUG 2003)

- (a) Executive Order 13148, of April 21, 2000, Greening the Government through Leadership in Environmental Management, requires submission of this certification as a prerequisite for contract award.
- (b) By signing this offer, the offeror certifies that--
- (1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or
- (2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: (Check each block that is applicable.)
- () (i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed in 40 CFR 372.65;

- () (ii) The facility does not have 10 or more full-time employees as specified in section 313.(b)(1)(A) of EPCRA 42 U.S.C. 11023(b)(1)(A);
- () (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);
- () (iv) The facility does not fall within the following Standard Industrial Classification (SIC) codes or their corresponding North American Industry Classification System sectors:
- (A) Major group code 10 (except 1011, 1081, and 1094.
- (B) Major group code 12 (except 1241).
- (C) Major group codes 20 through 39.
- (D) Industry code 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce).
- (E) Industry code 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C (42 U.S.C. 6921, et seq.), 5169, 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis); or
- () (v) The facility is not located within the United States or its outlying areas.

(End of clause)

252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

(a) "Definitions."

As used in this provision --

- (a) "Government of a terrorist country" includes the state and the government of a terrorist country, as well as any political subdivision, agency, or instrumentality thereof.
- (2) "Terrorist country" means a country determined by the Secretary of State, under section 6(j)(1)(A) of the Export Administration Act of 1979 (50 U.S.C. App. 2405(j)(i)(A)), to be a country the government of which has repeatedly provided support for such acts of international terrorism. As of the date of this provision, terrorist countries include: Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria.
- (3) "Significant interest" means --
- (i) Ownership of or beneficial interest in 5 percent or more of the firm's or subsidiary's securities. Beneficial interest includes holding 5 percent or more of any class of the firm's securities in "nominee shares," "street names," or some other method of holding securities that does not disclose the beneficial owner;
- (ii) Holding a management position in the firm, such as a director or officer;

- (iii) Ability to control or influence the election, appointment, or tenure of directors or officers in the firm;
- (iv) Ownership of 10 percent or more of the assets of a firm such as equipment, buildings, real estate, or other tangible assets of the firm; or
- (v) Holding 50 percent or more of the indebtness of a firm.
- (b) "Prohibition on award."

In accordance with 10 U.S.C. 2327, no contract may be awarded to a firm or a subsidiary of a firm if the government of a terrorist country has a significant interest in the firm or subsidiary or, in the case of a subsidiary, the firm that owns the subsidiary, unless a waiver is granted by the Secretary of Defense.

(c) "Disclosure."

If the government of a terrorist country has a significant interest in the Offeror or a subsidiary of the Offeror, the Offeror shall disclosure such interest in an attachment to its offer. If the Offeror is a subsidiary, it shall also disclose any significant interest the government of a terrorist country has in any firm that owns or controls the subsidiary. The disclosure shall include --

- (1) Identification of each government holding a significant interest; and
- (2) A description of the significant interest held by each government.

(End of provision)

252.247-7022 REPRESENTATION OF EXTENT OF TRANSPORTATION BY SEA (AUG 1992)

- (a) The Offeror shall indicate by checking the appropriate blank in paragraph (b) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term supplies is defined in the Transportation of Supplies by Sea clause of this solicitation.
- (b) Representation. The Offeror represents that it:
- ____(1) Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.
- ____ (2) Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.
- (c) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense FAR Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.

(End of provision)